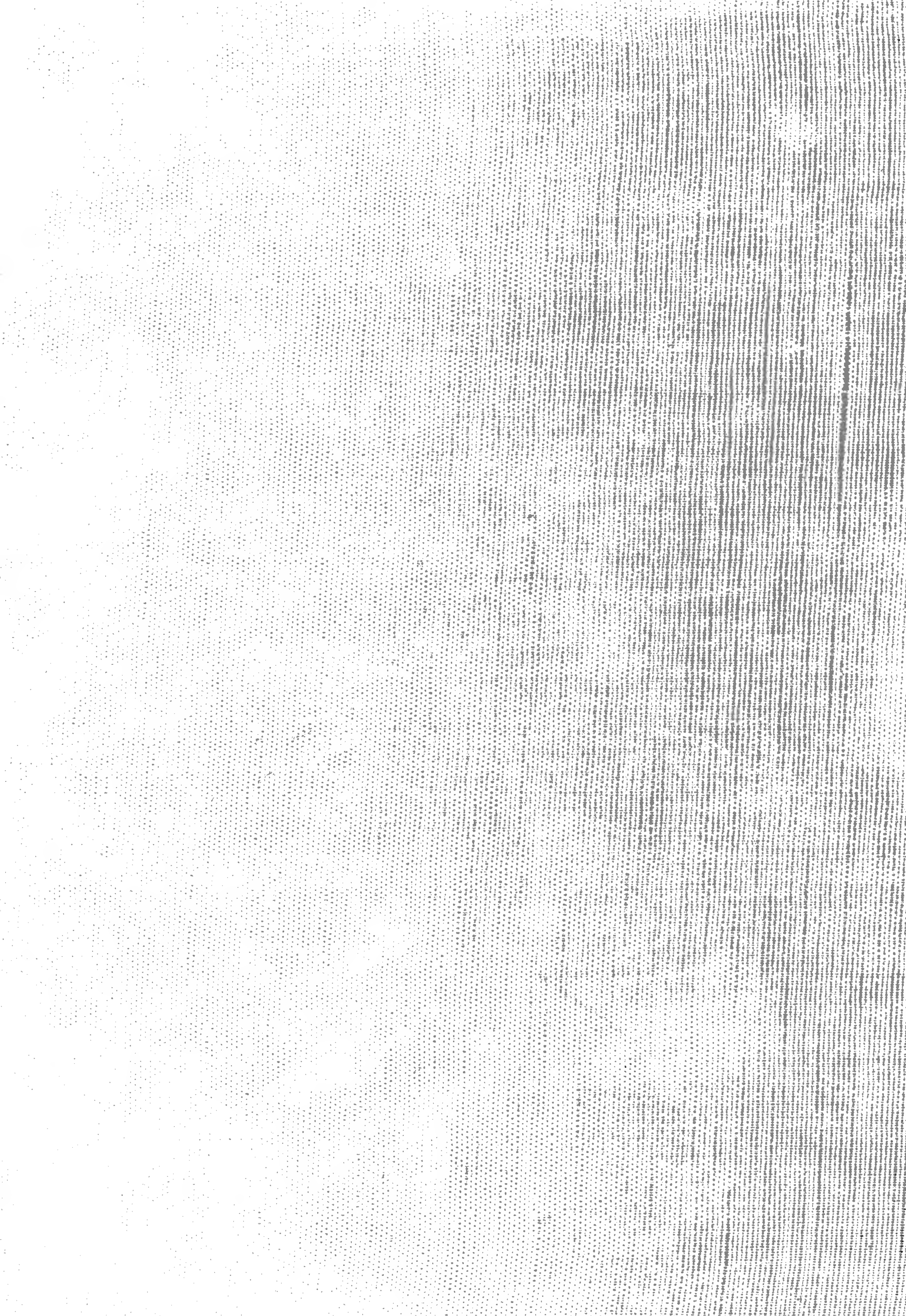


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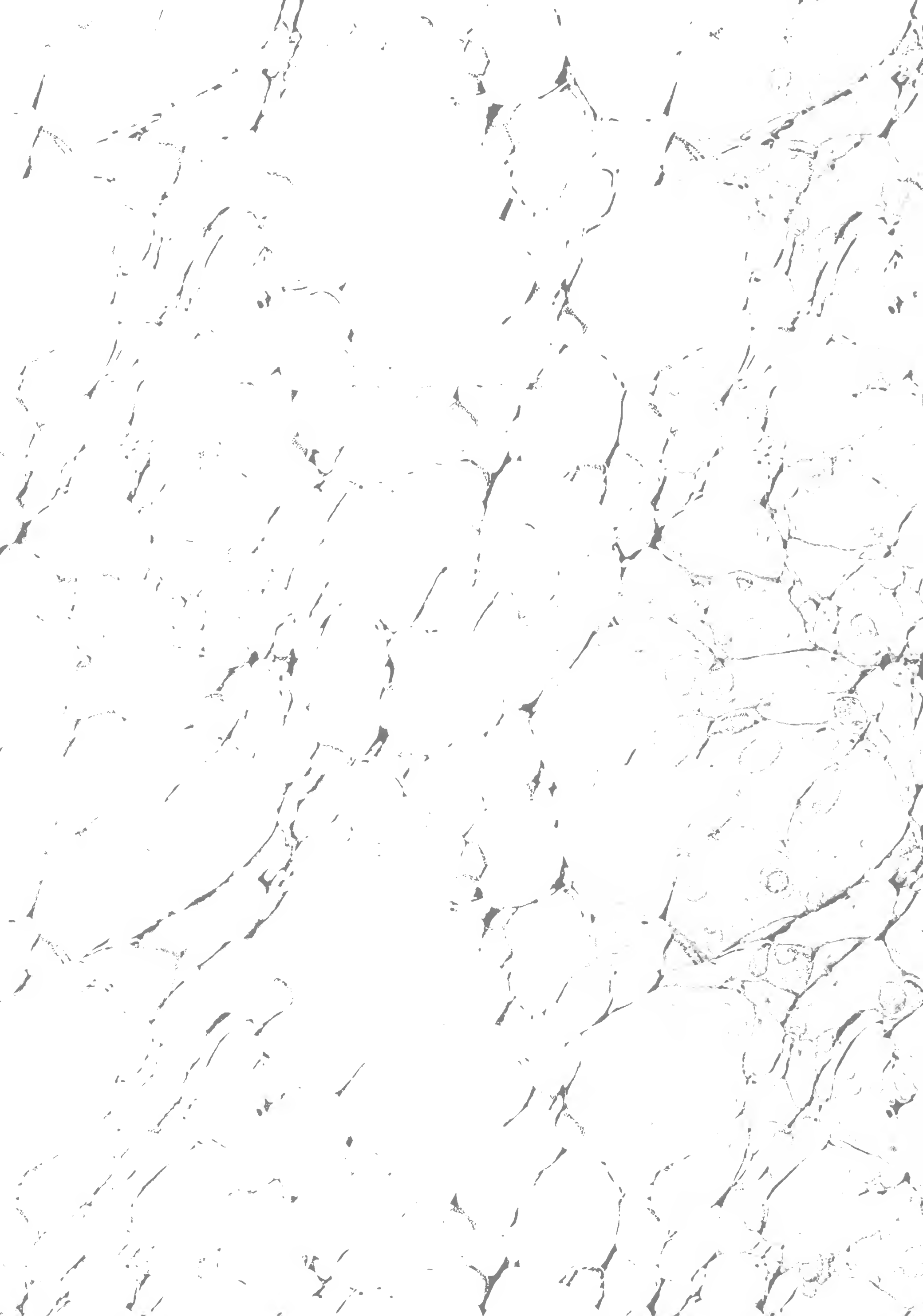
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THE NATIONAL NURSERYMAN



JANUARY 1917

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

*Peach, Gooseberries,
Currants, Berberis,
Spirea Van Houtte,
Other Ornamental Shrubs,
H. P. Roses, Etc.*

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.
MONROE, MICH.

MOUNT ARBOR NURSERIES

E. S. WELSH, Pres.

Shenandoah, Iowa



OUR SPECIALTY

A complete line of high quality nursery stock for wholesale trade.

APPLE SEEDLINGS

We are now assured of a choice lot of strong, healthy seedlings, which were grown on new land in the seedling district.

The supply of heavy seedlings is very limited. We have about 200,000 strong 1/4 inch and an equal number of 3-16 inch and up, also a good supply of No. 2 and No. 3. Will make special grades if desired.

GRAFTS

Apple and Pear Grafts made to order. A good list of varieties.

Consult us about your wants before buying.

Reliable Holland Nursery Stock
OF EVERY DESCRIPTION

FELIX & DYKHUIS

WHOLESALE NURSERIES

Boskoop, - - Holland

Conifers, Rhododendrons, Roses
Young trees for lining out, etc.

Ask for Our Beautifully Illustrated Catalogue

TOP NOTCH BERBERRY HUNBERGII SEEDLINGS

Big Drop in Prices. Come to Us.

Also

Peaches
Apples
Shrubs
Privet
H. P. Roses

Large Assortment of Varieties at Right Prices.

C. R. BURR & CO.,
MANCHESTER, CONN.

HOLLAND NURSERY STOCK

FALL OR SPRING SHIPMENT

From Schaum & Van Tol, Boskoop, Holland

Boxwood bushes, pyramids etc.; Roses, Rhododendrons, Evergreens, Hydrangea P. G., Azaleas, Koster Blue Spruce

PRICES READY NOW--WRITE FOR THEM.

French Fruit and Ornamental Stocks

from Vincent Lebretons Nurseries, Angers, France. Catalog ready now.

Norway and Schwedler Maples, Lindens, Oaks, Planes, Elms, Thorns and all deciduous trees from Union Nurseries, Oudenbosch, Holland.

Gooseberries and Manetti stocks from England.

Hardy Lilies (Auratum, Rubrum, Album, etc.), from Japan.




Herbaceous Perennials, etc., from Royal Tottenham Nurseries, Holland.

Raffia, Red Star brand and three other grades always on hand.

Write for prices

McHutchison & Co., ^{The Import} House 95 Chambers St., New York.

FOR THE SPRING OF 1917

 We offer our usual line of 
Apple, Plum, Cherry, Peach, Shade
 and Ornamentals.

WE CAN FURNISH IN LARGE QUANTITIES AND CAR LOTS

2 year Montmorency & Early Richmond Cherry
American Elm, 1¼ to 4 inch in caliper

Norway Maple, 8-10 ft. and 10-12 ft.

Soft Maple, 6-8 ft., 8-10 ft., 2½-3 in. caliper,
3-3½, 3½-4.

Catalpa Bungei, 1 and 2 year heads

C. M. Hobbs & Sons

Marion County

Bridgeport, - - Indiana

EVER BEARING STRAWBERRY PLANTS

OUR SPECIALTY

We grow more strawberry plants for The Trade, than any other nursery in the World, over 100 of the leading standard varieties.

We ship direct to your customers under your tags or any way you instruct us. Plants that are strong and vigorous, and absolutely true to name. About 100 acres of our crop this season was grown on land that was never set to plants before and such masses of roots you never saw. Such stock will not only please you but will make you customers that will come back with their "repeat" orders.

We can fill your orders any time from now until May 1st, with hardy grown plants that will live and do well anywhere strawberries are grown. We have upwards of 4,000,000 Progressive, and Superb, the best of the ever-bearers. At prices that will suit you if you are in the market. We also have Dewberry plants that are strictly A No. 1. We are short on Raspberries, and Blackberries, and shall be pleased to exchange—or buy good stock.

Ask for price list if interested.

E. W. Townsend

100 Vine St., - SALISBURY MD.

PAINESVILLE NURSERIES

1917
1854

63

Yes, we are getting old. But, like wine, our business improves with age.

TREES

We are very heavy growers of all the leading kinds of Fruit Trees, — such as Peaches, Pears, Plums, Cherries, etc., — Small Fruits, Shade Trees, Lawn Trees, Nut Trees and Evergreens; Hardy Shrubs and Vines of all kinds; and Hardy Roses.



AMERICAN ELMS

PLANTS Besides the output of 45 large greenhouses with a special line of Palms, Ferns and other decorative plants, our Hardy Perennial plantings occupy many acres. Peonies, Phlox, Iris, etc., are among the leaders.

SEEDS Our wholesale seed trade has enjoyed the normal, consistent growth due to the advertisement of quality and its results. We issue no packet cases, but have a big trade in bulk seeds with an established list of successful dealers.

THE STORRS & HARRISON CO.

NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Jackson & Perkins Company

Growers of the "Preferred Stock"—the "Made in America" kind, which is right here *where* you want it, *when* you want it and *as* you want it.

Newark, - - - New York

For 1916-1917 we have the largest stocks that we have ever grown, including good supplies of the usual "J. & P." specialties.

In Ornamentals:

ROSES, field-grown

TREE-FORM HYDRANGEAS

CLEMATIS

TREE-FORM LILACS

(Largest stocks in America)

AMPELOPSIS VEITCHII

DUTCHMANS PIPE
(Not hyphenated. Born
and raised here)

SHRUBS

(Extra fine stock)

PERENNIAL PLANTS

(Large assortment)

SHADE TREES

In Fruits:

APPLES

PEARS

PLUMS

PEACHES

QUINCES


(None finer grown)

CURRENTS

GOOSEBERRIES

Jackson & Perkins Company

Newark, - - - New York

 We sell to the trade only. We do not compete with our own customers by selling to planters.

Heikes—Huntsville—Trees



To Meet Your Needs in

Peach, Apple, Cherry, Pear, Plum, Compass-Cherry-Plum, Apricot, Pecan Seedlings, Privets, Roses (budded and own-root), Abelia Grandiflora, Berberis Thun., Spirea V. H. and Reevesiana, Lonicera Fragrantissima and Halleana, Kudzu Vines, and Sundry Ornamentals.

In good assortment of standard varieties. All our own growing.

Send us your orders and inquiries.

ROSES, Budded H. P's. One of our Specialties.

We grow them by the hundred thousands.

HUNTSVILLE WHOLESALE NURSERIES

HUNTSVILLE, ALA.

We have the Largest Stock of

Forest Seedlings and Shrubs



TO BE FOUND IN UNITED STATES

We offer 500,000 Berberry Thunbergii, 1 and 2 year, 6 to 30 inch, Althea Rosea, Calycanthus, Spiraeas, Deutzias, Forsythias, Dogwoods, Honeysuckles, Philadelphus, Privets, and large variety Shrubs, Forest Seedlings, Red Bud, Magnolias, Elms, Box Elder, Beech, and a great variety of Seedlings. Lining out Stock.

We are headquarters for

Hard Wood Cuttings

Send for Trade List

RIVERVIEW NURSERY CO.

McMinnville, - - - Tenn.

R. F. D. No. 2



SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of
Own Root Roses

ORNAMENTAL TREES SHRUBS

BERRIES

CLEMATIS

EVERGREENS

PEONIES

PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

70 Years

1000 Acres



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE



THE

North-Eastern Forestry Co.

CESHIRE

...Connecticut...

PRINCETON

THERE'S a name we are going to fix in your minds: PRINCETON! It can't be done in a day; it's going to take time; but we are going to make it mean something to you—to the Trade: a Quality and a Service that will be—different, distinctive. You know something of PRINCETON already. For a while, it was the actual Capital of the United States, for the Continental Congress sat here in 1783. You remember the Battle of Princeton. Washington took leave of his Army here. According to local tradition, he slept in every house and drank from every spring in the vicinity, making him the heaviest sleeper and the deepest drinker (of spring-water) in history. Princeton University was established in 1756. Princeton was the home of President Grover Cleveland. It is the home of President Woodrow Wilson. It is the home of the PRINCETON NURSERIES. Remember the Name, the Place, the People. It is our purpose to remind you in pleasant and profitable ways—to us and to you, too,—of

PRINCETON

IN NEW JERSEY

J. H. Skinner & Co.

Topeka, - Kansas



Apple Seedlings

Japan and French

Pear Seedlings

Forest Tree Seedlings

FRUITS TREES

SMALL FRUITS

Rhubarb, Myatt's Linnaeus, divided roots, pure stock; Shade Trees, including a fine lot of Soft Maple and White Elm.

CATALPA BUNGEI

6½ foot stems, straight and smooth

Bechtel's Double Flowering Crab

Ornamental Shrubs

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

Rawhide Brand of Shipping Tags and Tree Labels

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

ORNAMENTAL

TREES, SHRUBS, VINES, EVERGREENS
HARDY HERBACEOUS PLANTS

225 Acres

Entirely devoted to the growing of the
best quality of ornamental nursery stock.

WHOLESALE ONLY

We also grow the "unusual" things, you
cannot find elsewhere.

Small Trees and Shrubs for
Planting in Nursery Rows.

We shall have our usual supply for Spring
delivery. Catalogue ready January first.

RAFFIA HEADQUARTERS

Supply of our usual brands on hand at
all times.

Thomas B. Meehan Co.,
WHOLESALE NURSEYMEN
Dresher, - Penna.

SPECIMEN EVERGREENS

IMMEDIATE SHIPMENT



Arbor Vitae, American, 3 to 4 feet.

" " " 4 to 5 feet.

" " " 5 to 6 feet.

" " Columbia, 2 to 3 feet.

" " Lutea, 3 feet.

" " Pyramidalls, 3 to 4 feet.

" " " 4 to 5 feet.

" " Tom Thumb, 2 feet.

Juniper Irish, 4 to 5 feet.

" Virginiana Glauca, 3 feet.

" " Sinensis, 2 to 3 feet.

" " " 4 to 5 feet.

Retinispora Filifera, 2 to 2½ feet.

" " Aurea, 15 inches broad.

" Obtusa Nana, 12 to 18 inches.

" Squarrosa, 2 to 3 feet.

Spruce, Kusters, 3 to 4 feet.

Boxwood, Pyramids, 3 to 4 feet.

" Standard

Rhododendrons, choice lot.

W. B. COLE, - - Painesville, Ohio

JOHN WATSON & CO.

Newark, New York

AGENTS FOR
F. DELAUNAY,
Angers, France

New Catalogue for Season 1916-1917 is now ready for
distribution and will be sent on request. Nurserymen
who like good stocks, evenly graded, properly packed, at
closest prices and lowest importing expenses, should write
us. We will gladly refer to last season's customers.
One wrote: "Delaunay's stocks check up more good points
in quality, grades and packing, than any others received."
This referred to a two-car-load order. Another wrote:
"Your importing expenses were the lowest." And this re-
ferred to a five-carload order. The combination of Quality,
Price and Service that makes Value, is appreciated by
buyers. If you want something better, for less, try us.
We have shown others; we can show you.

August first, 1916.

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa.

The Best Tree Digger on Earth



Used and Recommended by Leading
Nurserymen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

Stark Bros. Nursery & Orchards Co.
LOUISIANA, MO.

THE BEST IN NURSERY PRODUCTS

We carry a full line of fruit and ornamental trees, evergreens, shrubs, etc. Send us your list of wants.

Listed below are some real winners. If what you need is not here, write for our trade list.

15,000 Oriental Planes from 1 1/4 to 3-inch caliper. A large stock of Sugar Maples, American Elms, Carolina Poplars, Lombardy Poplars, Double Flowering Japan Cherries, Weeping Japan Cherries, Flowering Apples, Flowering Peaches, Magnolia Tripetela, Japan and American Judas, English Walnuts, Japan Walnuts, California Privet, fine, 2 to 3 ft. and 3 to 4 ft.

Apples and Peaches, 10,000 Downing Gooseberries, 2 years, No. 1.

HOOPEs, BRO. & THOMAS
COMPANY
Established 1853 West Chester, Pa.
Maple Avenue Nurseries
Philadelphia Office:
222-3-4-5 Stephen Girard Building 21 South Twelfth Street



BERRY'S Wholesale Nursery

Small fruit plants in variety; rhubarb; horseradish; California Privet; Barberry Thunbergii; Hydrangea P. G.; Spirea Van Houghti; Peonies—home grown and imported; Imported Boxwood, etc.

Stock in storage. Can ship any time.

See list before placing your order.

P. D. BERRY,
Dayton - - - Ohio

STRAWBERRY PLANTS

Let us fill your orders for Strawberry Plants

*We dig and ship plants any-
time from November to May.*

Shipments made either to you or direct to your customers. Our plants are hardy everywhere strawberries are grown. Plants strong, vigorous and healthy with an unsurpassed root system.

All plants tied 25 to the bunch and every bunch labeled.

Every Plant Guaranteed *True to Name*

We have all the best varieties—Chesapeake, Dunlap, Sample, Big Joe, Klondyke, Aroma, Wm. Belt, Gandy, Haverland, and 70 others. Also Progressive and Superb, the best everbearing kinds.

New Berry Book and Wholesale list now ready.

Let us fill your orders—You will enjoy the praise our plants will bring you.

THE W. F. ALLEN CO.
100 MARKET ST.
SALISBURY - - - MD.

When writing to Advertisers please mention the National Nurseryman.

ENGLISH NURSERY STOCK

GROWN IN LARGE QUANTITIES

RHODODENDRONS a splendid lot this season, fine bushy plants. Plenty of the hardy Catawbiense named varieties suitable for the American climate including the newer and superior kinds.

AZALEAS, ANDROMEDA, KALMIA and other American plants in great variety.

CONIFERS a large stock, of all hardy kinds.

HARDY ORNAMENTAL, EVERGREEN and DECIDUOUS TREES.

ROSES. Dwarfs and Standards in all varieties.

CLEMATIS AND CLIMBING PLANTS.

FRUIT TREES Espalier trained pyramids in quantity.

MANETTI ROSE STOCKS 1 year splendidly rooted from sandy loam, none better imported.

A general assortment of hardy outdoor stock. Glad to answer inquiries.

THIRTY YEARS SUCCESSFUL TRADING IN THE STATES

No Agents. Write direct for wholesale catalogue to

WALTER CHARLES SLOCOCK, Goldsworth Nurseries, Woking Surrey, England

Half an hours rail from London & S. W. Ry., Main Southampton Line. Cable Slocock Woking. (A. B. C. Code).

Place Your Order Now For Stock Needed In Spring

For years we have specialized in stocks for American nurserymen, and now Grootendorst's Boxwood, Rhododendrons, Kalmias, and Magnolias are known as the leaders.

Our stock of Conifers, including Junipers, Firs, Spruces, and Arborvitae, is complete. All Grootendorst Conifers are transplanted every other year to insure strong root systems. Send your order to our New York branch.

F. J. Grootendorst & Sons

Room 1101

10 BROADWAY

New York City

V.G.'S VERY GOOD
HARDY NURSERY STOCK SUCH AS
AZALEAS, BUXUS,
CONIFERS, EVERGREENS,
PAEONIES, MAGNOLIAS,

RHODODENDRONS, ROSES, ETC.

Offered by

VAN GELDEREN & CO.

Wholesale Nurseries

Ask for Catalogue

BOSKOOP (Holland)

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Spring 1917

GRAPE VINES—One and two years old. Varieties largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas. Free from weed seeds, all cleaned and guaranteed first class.

Correspondence solicited. Price list upon request.

CHAS. M. PETERS

P. O. Address, Salisbury, Wicomico County, Md., R. F. D. 3

Long Distance Phone and Telegraph, Salisbury, Md.

The Framingham Nurseries

200 Acres

High Grade
Trees, Shrubs,
Evergreens,
Vines, Roses,
Etc.



Fine Stock
of
Rhododendrons
Kalmias
and
Andromedas

Send for Price List

W. B. WHITTIER & CO.

FRAMINGHAM, MASS.

We have a splendid stock of

Grape Vines

and other small fruit plants for the Nursery trade, graded up to the highest standard and sure to please you.

Give us a trial order, send in your list now for quotations

WHELOCK & CONGDON

SUCCESSORS TO
WILLETT & WHELOCK

North Collins, - N. Y.

Foster-Cooke Co.

Nurserymen

Fredonia, N. Y.

Growers of

Grape Vines, Gooseberries, Currants

One and two years old. Graded up to the highest standard. Our stock never looked better. Write us for catalog. Send us your list of wants. Our prices are right, our stock A No. 1.

We grow our Stock up to QUALITY and GRADE, not down to a price. Nevertheless, our prices are always in line, you can't afford to pay less, and there's no sense in paying more. If you are pleased with what you have been getting, you will be better pleased with our stock.

When writing to Advertisers please mention the National Nurseryman.

CALIFORNIA PRIVET

Over two million plants of superior quality

All sizes from one foot to four feet

Very low rates in carload lots

Also Amoor Privet and Berberis Thunbergii in quantity

J. T. LOVETT, Little Silver, New Jersey

Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

Leading Specialties for Spring 1917

Cherry, Two Year, extra fine, leading varieties
in car lots

Cherry, one year, 11-16 up and smaller grades
Our Blocks of Cherry are perhaps the largest
in the country

Std. & Dwf. Pear, Japan Plum, Compass Cherry
Peach, One Year, Car lots or less

Weeping Mulberry and Bungei Catalpa

Hardy Budded Pecans and English Walnuts

WE OFFER

Grape Vines, Currants and Gooseberries
in all varieties and grades

—also—

Grape and Currant Cuttings and Light
Grade of Vines for Lining Out
in Nursery Rows

WRITE FOR PRICES

F. E. SCHIFFERLI, Fredonia, N. Y.

**We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS**

FOREST TREE SEEDLINGS we only have in limited
supply this season, and would advise placing your orders
early.

TREE SEEDS we can supply in limited quantities.
Send list of your requirements for lowest prices. Trade
list ready.

The Willadean Nurseries
Sparta, Ky.

The Westminster Nursery
J. E. Stoner, Prop.

WESTMINSTER - - MARYLAND

We offer for Fall 1916 and Spring 1917

500,000 PEACH, 40 Varieties, 1 year buds

CALIFORNIA PRIVET, 1 year and 2 year

ASPARAGUS, 1 and 2 year

SNYDER BLACKBERRY, root cuttings

DOWNING GOOSEBERRY PLANTS, 2 year

HYDRANGEAS, P. G., 2 to 3 feet and up

BARBERRY THUNBERGI, 2 and 3 year transplanted

Can supply the above stock in car load lots or less, also,
have a large stock of Rhubarb, Cumberland Raspberry
Plants, Spireas, Deutzia Assorted, nice specimen plants.
Evergreens, Horse Chestnut, N. Maple, Lombardy Poplar
and Planes, etc.

We will make attractive low prices for early orders
SEND LIST OF WANTS

**For FUMIGATION With
HYDROCYANIC ACID GAS**

“CYANEGBG”

Sodium Cyanide in egg shape, each egg weighs as
near one ounce as possible. Destroys scale insects
on Fruit Trees, Nursery Stock, Plants under glass
and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.
100 WILLIAM ST. - NEW YORK, N. Y.

WOOD LABELS

For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite,
combined with the quality of our product is un-
surpassed.

Samples and prices are at the command of a
communication from you.

Dayton Fruit Tree Label Co.
South Canal St., Dayton, Ohio



Hill's Evergreens Grow
BEST FOR OVER HALF A CENTURY

Hill's Evergreens

It is not a bit too early now to begin to figure out what you will need in the way of small Evergreens for lining out next Spring. If you have never handled Evergreens, try them out. You will find this will develop into one of your most profitable departments. Here is a partial list of what we have to offer, better send for complete catalog and price-list.

EVERGREENS AND CONIFERS

Variety	Size Inch	Variety	Size Inch
Abies Balsamea (Balsam Fir)	4-8	Pinus Banksiana (Jack Pine)	3-6
Abies Tsuga Canadensis (Hemlock)	6-10	Pinus Banksiana (Jack Pine)	6-12
Abies Concolor (Concolor Fir)	2-5	Pinus Mugho (Dwarf Mugho Pine)	2-4
Abies Concolor (Concolor Fir)	4-8	Pinus Muhgo (Dwarf Mugho Pine) Seedl.	4-8
Abies Douglassi (Douglas Fir)	3-6	Pinus Mugho (Dwarf Mugho Pine) Trans.	4-8
Abies Douglassi (Douglas Fir)	6-10	Pinus Ponderosa (Bull Pine)	3-6
Abies Douglassi (Douglas Fir)	6-12	Pinus Ponderosa (Bull Pine)	4-8
Buxus Sempervirens	2-5	Pinus Ponderosa (Bull Pine)	12-15
Ginkgo Biloba (Maidenhair Tree)	10-12	Pinus Resinosa (Red or Norway Pine)	4-8
Juniperus Communis (English Juniper)	4-8	Pinus Resinosa (Red or Norway Pine)	6-10
Juniperus Scopulorum (Rky. Mt. Silver Cedar)	4-8	Pinus Rigida (Pitch Pine)	2-4
Juniperus Virginiana (Red Cedar)	3-6	Pinus Rigida (Pitch Pine)	4-8
Juniperus Virginiana (Red Cedar)	6-10	Pinus Strobus (White Pine)	2-5
Picea Alba (White Spruce)	2-5	Pinus Strobus (White Pine)	4-8
Picea Alba (White Spruce)	6-12	Pinus Strobus (White Pine)	6-10
Picea Canadensis (Black Hill Spruce)	3-6	Pinus Strobus (White Pine)	6-12
Picea Engelmanni (Engelmann Spruce)	3-6	Pinus Sylvestris (Scotch Pine)	3-6
Picea Engelmanni (Engelmann Spruce)	4-8	Pinus Sylvestris (Scotch Pine)	6-12
Picea Excelsa (Norway Spruce)	2-5	Pinus Sylvestris (Scotch Pine)	10-20
Picea Excelsa (Norway Spruce)	4-8	Taxus Canadensis (American Yew)	6-12
Picea Excelsa (Norway Spruce)	6-10	Taxus Canadensis (American Yew)	12-18
Picea Excelsa (Norway Spruce)	4-8	Taxodium Distichum (Bald Cypress)	4-8
Picea Excelsa (Norway Spruce)	6-10	Thuya Occidentalis (American Arbor Vitae) ..	2-5
Picea Pungens (Colorado Blue Spruce)	4-8	Thuya Occidentalis (American Arbor Vitae) ..	4-8
Pinus Austriaca (Austrian Pine)	2-5	Thuya Orientalis (Chinese Arbor Vitae)	5-10
Pinus Austriaca (Austrian Pine)	6-12	Thuya Orientalis (Chinese Arbor Vitae)	6-12

When it comes to handling and packing Evergreens, you have a right to expect something better than ordinary from HILL'S because we have made a special study of these features for some years. A lot of otherwise good Evergreens have been spoiled by poor handling and packing.

THE D. HILL NURSERY CO., INC.



EVERGREEN SPECIALISTS
LARGEST GROWERS IN AMERICA

Dundee, Illinois
BOX 401



The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK
The National Nurseryman Publishing Co., Incorporated

Vol. XXV.

HATBORO, PENNA., JANUARY, 1917

No. 1

PLANTING OF ORNAMENTALS



A well selected assortment of evergreens, nicely arranged as a foundation planting of a house.

Foundation or base planting of houses and buildings is very essential to a finished appearance. It matters not how artistic and skillful the architect has been or how well the builder did his work, unless there is a little base planting there is always an unfinished look. Occasionally, with houses of Spanish design, with large overhanging eaves, there is created a position where it is next to impossible to get anything to grow and look well close to the wall, due to the eaves keeping off the rain and the ever present dryness along the foundation. Such a con-

dition calls forth the planter's skill in selection of material and arrangement to "tie the house down" as it were, and relieve the bareness. The planting has to be located some distance away and more consideration given to the individual plant. The average building, however, does not present such problems but lends itself very nicely to the arrangement of pleasing groups of plants, although it is wise at all times to keep the planting as far away from the walls as is consistent with a good appearance.

As a rule the plants selected for the front of the house

should be of those that look well twelve months in the year. Such plants as paeonies, hollyhocks, or other herbaceous plants that die down to the ground, are pleasing enough when in flower, but their season is brief and they should be relegated to other parts of the grounds.

Shrubbery is very effective and suitable, and when proper kinds are used it looks well for the greater part of the year, but the foliage or general effect should be the prime consideration rather than the bloom and fruit.

Evergreens, however, are the most fitting, but here again so much depends upon the selection of kinds. Too often one sees the stiff firs and spruces used in these groupings. Such plants are out of place from the gardener's point of view, because there is no future for them; they soon become one-sided, overgrown and diseased.

The accompanying illustration shows a well selected assortment, nicely arranged. They are kinds that are not too formal in their growth and blend nicely with each other.

The Arborvitae, *Retinispora pisifera*, *R. plumosa* may be recognized in the background, while in the foreground are those of a dwarfer nature, *Pinus Mughus*, *Mahonia* and *Rhododendrons* at the right of the picture near the entrance.

Right off the corner on the left the grouping is improved by planting the taller growing, *Retinispora squarrosa*, well to the front.

Some people are apt to say that evergreens are monotonous and stiff. Only too many plantings give just cause for this criticism, but if the selection is skillfully made there is constant change in the color as well as harmony in the growth that is pleasing at all times. As in the illustration, a pretty spring effect may be added by planting small groups of Darwin Tulips among the dwarfer growing evergreens in the foreground, Daffodils may also be used to good effect.

Rank growing summer bedding plants, such as geraniums and Scarlet Sage, which are sometimes used to give a touch of color are likely to damage the evergreens unless carefully kept in bounds. There is much more dignity to the grouping if proper plant harmonies are observed.

Many such plantings are a failure largely due to the American impatience for immediate results; too large plants being used to give this effect from the start.

Such positions are invariably dry, due to the foundations of the house and the walls and eaves keeping off the rains, so that extra care should be taken in the preparation of the bed, which should be so made as to conserve as much moisture as possible. A common practice, especially with amateurs, is to raise the bed too high; about two inches above the turf is ample elevation.

Evergreens cannot be pruned and kept within bounds to the same degree as shrubbery. A better way to keep the group in harmony is to dig them up and rearrange them about every third year. Pruning may be judiciously done every June, but never with the shears. Prune back the straggling shoots with a knife, but not beyond the previous year's growth, as an evergreen is slow to break from old wood; keep the dead twigs and leaves cleaned out from the centers of the plants so as to allow for the circulation of air and prevent red spider.

Sheared evergreens in groups is wrong in every phase

of this very common practice. It may be permissible to shear certain kinds such as box when planted in a very formal manner along terraces, walks and such like but in groupings near the walls of a building aim to allow each plant to show its individuality yet select them so they will harmonize with each other and fit the position.

NEW JUNIPERS ORIGINATING AT THE D. HILL NURSERY CO., INC.

Mr. George B. Sudworth, Dendrologist of U. S. Department of Agriculture, Forest Service has suggested the following names for four new types of the Juniper family: *Juniperus Virginiana pyramidaliformis Hillii*, *Juniperus scopulorum pyramidalis argentea Hillii*, *Juniperus Scopulorum viridifolia Hillii*, *Juniperus scopulorum horizontalis Hillii*.

The above Junipers are distinct in form and color. The *J. Vir. pyramidaliformis Hillii* is a neat, compact pyramidal type of the Platte River Cedar. The specimen was found growing in a block of *Juniperus Virginiana*, produced from seedlings from the hardy, rapid growing Platte River type of the Red Cedar. It has a somewhat similar form and habit of growth as *Juniperus Sinensis stricta* and offers the lovers of fine conifers a hardy, rapid growing juniper which is native of soils and conditions over a large portion of the United States.

Juniperus scopulorum argentea Hillii, *Juniperus scopulorum pyramidalis viridifolia Hillii*, *Juniperus scopulorum Horizontalis Hillii*. The three above forms were selected from seedlings grown from seeds gathered by Mr. D. Hill, President of the D. Hill Nursery Company from the beautiful silvery tinted juniper growing in the Rocky Mountains.

The *Juniperus scopulorum argentea* is a compact, narrow pyramidal, showing a fresh silvery colored foliage.

Juniperus scopulorum pyramidalis viridifolia is also a pyramidal form showing an attractive shade of green. *Juniperus scopulorum horizontalis* is a broad open grower with a delicate graceful branching habit, the foliage has a bright silvery tint. In habit of growing this variety resembles the well known and much admired *Juniperus Pfitzeriana*, except the *J. S. horizontalis* produces delicate silvery branches while *Pfitzeriana* is a bold, strong grower.

The Junipers described above should be a fine addition to the family, they will be propagated and offered to the trade under the above mentioned names, by The D. Hill Nursery Co., Dundee, Ill. It should be satisfying to American planters to know that their Junipers are hardy sorts, adaptable to soil conditions and climate here in America.

While not wishing to question the appropriateness of the names from a botanical standpoint, we would suggest that the D. Hill Nursery Co. as originators and distributors, affix trade names that will be less cumbersome than their botanical ones. If it is done in the beginning there will be less likelihood of later confusion and others offering the same plant under a popular name, and so appropriating the credit due the originators.—Editor.

STANDARDIZATION OF NURSERY PRODUCTS

An Address before the California Nurserymen's Association at Santa Barbara, October 26, 1916

By William T. Kirkman, Jr., Kirkman Nurseries, Fresno, California.

THIS certainly is an age of standardization of products and merchandise of all descriptions. Now a-days when one purchases a pound of butter, it must weigh one pound; a gallon of gasoline must contain four full quarts, and it must not have been diluted so that the specific gravity is below a certain point, which is regulated by the government. In horticultural products most sales are made under established governmental specifications. Where a carload of prunes are sold it is designated as 70's, 60's, 50's, as the case may be; it means that the entire shipment will average 70, 60 or 50 prunes to the pound. A shipment of oranges is sold to the consumer with the knowledge that there are just so many oranges in the pack, and usually with the further assurance that the quality has been passed by a competent inspector. A carload of grapes is carefully packed by skilled laborers and the sugar content is accurately tested before it is offered to the consumer for his table. There has been a general movement to compel the delivery of a dollar's worth of produce for every dollar expended, and the consumer knows that he is buying a certain standardized quality. This movement is not only a benefit to the consumer but extends its greatest and most far reaching benefit to the producer. To standardize a product and offer a superior quality to the buying public, means that the public immediately responds with a decided increase of consumption, this fact is proven in many instances in California. To cite a local instance in the San Joaquin Valley, the raisin industry has been put on a firm foundation and the market practically doubled by intelligent management at the hands of the raisin Association. Business houses find that the best way to advertise their efficiency is to declare to the public that they are affiliated with organizations governing the service they are marketing. Even in the windows of our banks, we find a card stating that they are members of a certain banking association. Our daily newspapers assure us that the news that is printed on their pages is guaranteed to be authentic by Associated Press, or the International news service. The valuable feature claimed by the various Labor Unions, is that a workman belonging to a Union is an efficient workman who can render you accurate and speedy service. If the California Association of Nurserymen wishes to keep pace with this line of standardization, it is high time that it be proven to planters, and that by doing business with the nurseryman affiliated with this organization, he will be guaranteed a certain grade and quality of nursery stock, and he will not by any chance receive shipment of inferior, poorly graded, or damaged trees. It is safe to say that the planting public would respond as quickly to such a movement as the buying public has done in other products.

We all know of many unsatisfactory deliveries of nursery stock, not only to the planters but also between ourselves. We all know the temptation to get a little more money out of a block of stock, simply by shutting our

eyes to the technique of proper grading. Is there one among us who has not been exasperated to the fighting point because of the receipt of a shipment of poor stock when he had been depending on the nurseryman to send a first-class article, and when it was then too late to refuse the shipment and get a good supply elsewhere?

Gentlemen, is the California Association of Nurserymen really doing what it should in demanding a uniform output by its members? Should not members of this Association put out a certain definite quality under each named grade? It is not fair that some of us should put in to the first grade, that is 4 to 6 feet trees in deciduous nursery stock, practically everything in the nursery row and sell at a lesser price when others are including in this grade only good straight, well rooted trees that caliper between $\frac{1}{2}$, to $\frac{5}{8}$, or $\frac{7}{8}$ to $\frac{3}{4}$ inch?

There is another step—a much longer stride, that also could well be discussed under this head, viz., the standardization of varieties. A general plan of getting together on "strains" or new varieties. If we nurserymen could really all pull together for our own good and the most efficient service to the planters it would not be impossible or impractical to collectively employ a man to oversee the securing of all propagating wood, even to plant and own our own budwood orchards, and to carefully expert any new "strain" or variety before any member be allowed to advertise to the public that he has something far superior to the old fashioned stuff being marketed by his moss-back contemporaries.

Let me hasten to assure you that I do not depreciate the value of new introductions, and more productive strains of old varieties, but we must admit that almost every splash made by the many remarkable and astounding "new varieties" which have been offered to susceptible planters, has died away, not even leaving a ripple in the stream of steady output of known and tried sorts.

Some new discoveries have really made good and hold important places in the orchards and vineyard industries, but few of them have really cleaned the field of all competition as has been often prophesied for them.

A few years ago the Tilton apricot was advertised far and wide as the certain successor of all the old varieties by an enterprising nursery company, and many trees were sold throughout California and Oregon at fifty cents and \$1.00 each, while the remainder of us were looking for chances to sell poor old Blenheim and Royal at 20 cents or less. The Royal and Blenheim are still doing business at the old stand and the Tilton, while a valuable fruit in many localities, is holding third place to say the best. The Washington Navel is still with us notwithstanding the Thomson's Improved. The old fashioned Mission and Adriatic fig are still yielding good interest on a valuation of a \$1000 to \$2,500 per acre in many instances, notwithstanding the newer Smyrna types, and the new "clean sweep" the Kodata. There are new strains of the old Petite de Agen prune, which are reputed to be

mathematically certain to fill the coffers of the orchardist, while producers of the old strain sink into financial lethargy, are getting to be quite the fad.

Every honest and progressive nurseryman here is doing his best to secure propagating wood from the best orchards, and still give attention to any new variety of merit. Let's get together and stop spending money for advertising space to play upon the credulity of the public at the expense of legitimate nursery progression.

Let us standardize our stock, our varieties, our advertising and our courtesy to each other, and at the same time give the public more for its money than it is now getting.

REPORT OF THE SECRETARY OF AGRICULTURE ON THE CONTROL OF INSECTS

While all the State Experiment Stations support work in economic entomology, and while many other countries are developing services in this direction, the Department of Agriculture has by far the largest organization for the purpose of research on insect pests. It is virtually the leader of the world in the warfare against injurious insects. It has in its files biological notes on thousands of species and is studying them from all points of view in its field laboratories. No less than 143 distinct projects are being investigated at the present time, involving possibly 500 of the species of insects most injurious to crops, domestic animals, stored foods, forest products, shade trees, and ornamental plants. It is safe to say that some form of remedial treatment has been found for every markedly injurious insect in the United States, but continued efforts are being made to find something more effective or cheaper or simpler.

Many striking things have been accomplished. The pear thrips, which at one time threatened the extinction of the Pacific coast deciduous-fruit industry, is no longer feared. Two serious pests of the clover-seed crop now can be handled by slight variation of cropping methods. The bark-beetles of our coniferous forests, which have imposed a loss comparable to that resulting from forest fires, can be controlled at very little expense. Sprays and spraying machinery have been developed which can be used successfully against practically all leaf-feeding species. The fumigation of nursery stock and of warehouses has been perfected. Such injurious species as the onion thrips, the grape-berry moth, the alfalfa weevil, the tobacco hornworm, and many others of recent prominence, can be controlled. The spread of the gipsy and brown-tail moths through our northern forests and orchards has been prevented. These injurious insects not only have been kept in a comparatively small territory, but are being reduced in number year after year by active scouting, spraying, banding, and egg destruction, and through the aid of parasites brought from Europe and Japan. Although the spread of the cotton boll weevil—which represents probably the most difficult problem in insect control—has not been stopped, the investigations of the department's entomologists have shown the southern planter how to reduce greatly the potential damage and how to grow cotton in spite of the weevil.

An important development in this practical entom-

ological work of recent years has been the establishment of a number of more or less temporary field laboratories, scattered over the country. Thus the expert workers are taken into the centers of activity of the injurious species. Great stress is being laid on what may be termed the cultural method of insect control. The intimate life round of the insect pest is studied in close connection with farming methods in order to ascertain whether by variation of cultural practice the insect damage can not be considerably reduced. Remedial work of this sort is extremely practical. Investigations have shown that in many instances partial or nearly complete control can be gained by some change in farm management. This naturally is the best remedy, except possibly in the case of introduced pests, where control can be secured by the employment of parasites or other natural enemies.

Technical methods of control, mechanical and chemical, including sprays and spraying machinery, fumigation for citrus orchards, nursery stock, mills and warehouses, or trapping methods and other means of mechanical destruction also have been studied and developed. In the large problems it frequently has happened that cultural, biological, and technical measures are used at the same time.

When the enormous annual losses from injurious insects are considered it is clear that the value of the department's work in applied entomology is very great.

E. J. McGregor in an article in the *Journal of Economic Entomology*, gives an account of a mite that is attacking the privet in the south. While the Amoor River Privet seems to be the principal host for this pest, it is recorded on other plants such as the Dock, Oxalis, Strawberry, Boston Ivy, etc.

The damage done by this pest is often very noticeable, and shows up the most with the approach of the fall. The heaviest infestations occur in September and October.

The mite feeds on the under sides of the leaves and is indicated by a yellowing or fading of the infested leaves, which finally fall until the plants become entirely defoliated.

One season's defoliation rarely results in the death of the Privet bushes, as a second crop of leaves is soon developed, but constant attacks soon weaken the plants until they finally succumb, leaving gaps in the hedges.

Several insecticides have been tested against this pest. Lime sulphur seems to have produced the best results.

S. A. Graham, in the *Journal of Economic Entomology*, gives an account of efforts to control the white pine weevil.

The most effective remedies prove to be creosote sprayed April 13th pure strength. While this slightly injured the plants it was effective in destroying the weevils. A lime sulphur at scale strength, which had been recommended as a deterrent, in this trial at least proved valueless.

The experiments so far are by no means conclusive.

I have enjoyed your magazine the past year very much and wish to subscribe for it for 1917.

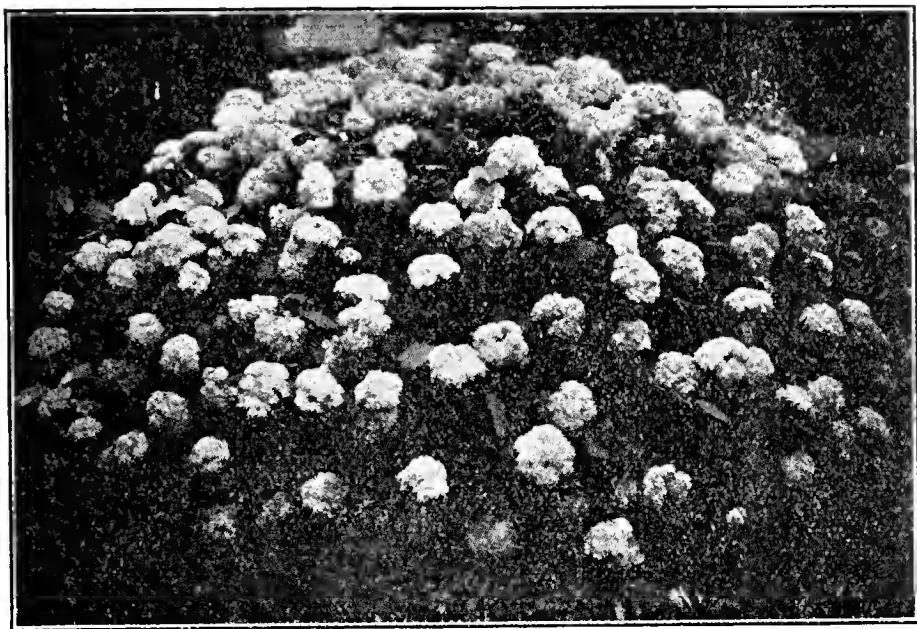
Yours respectfully,
Landscape Gardener. C. B. TURNER, Stoughton, Mass.

Hydrangea Aborescens Sterilis

By Thomas A. McBeth, Springfield, Ohio.

There seems to be some misunderstanding in regard to *Hydrangea arborescens sterilis*. As I claim to be the first to have grown it for the general trade (although it has been grown by florists and nurserymen for the local trade, for over fifty years), I thought I might be able to give a few interesting points as to its history.

It does not seem to be generally known there are two distinct varieties of *Hydrangea arborescens*, which I have



Hydrangea arborescens sterilis

called for the sake of convenience, *H. arborescens sterilis*, and *H. arborescens sterilis grandiflora*.

The first I take to be a sport of *H. arborescens* and the other a sport of *H. arborescens sterilis*, for the following reasons:

H. arborescens, and *H. arborescens sterilis*, are identical except the flower.

I have seen plants with all the gradations from the radiate form of *H. arborescens*, to the compact ones of *H. arborescens sterilis* on the same plant, and, indeed on the same stem.

The difference between *H. arborescens sterilis* and *H. arborescens sterilis grandiflora*, is in the latter the leaf is heart shaped and the petiole is longer, the individual floret is larger, the time of flowering is about a week earlier, and the stems are longer and more slender, which makes it more liable to fall with the weight of the flowers.

This is the variety Mr. E. G. Hill registered as *H. grandiflora*. My reason for thinking *H. arborescens grandiflora* is a sport of *H. arborescens sterilis* is, I had a plant of the latter that threw up a stem that flowered and was a complete counterpart of *H. arborescens grandiflora*. How they propagate in nature I don't know. I have seen them under natural conditions growing side by side.

I consider the *H. arborescens sterilis* by far the better for landscape work on account of its more upright and compact habit.

HOLLAND NURSERYMEN TAKE STEPS TO PREVENT THE DUMPING OF NURSERY STOCK IN THE UNITED STATES AND CANADA

The Protective Association of Holland Nurserymen, in its meeting, held at Boskoop, September 12th, 1916, resolved to submit for the signatures of its members, a mutual agreement, in which they bind themselves not to ship any nursery stock to the United States and or Canada to be sold at public auction. Any one found breaking this agreement to pay a fine of five hundred guilders.

In the meeting of October 6th, 1916, the agreement was read and signed by all members present except one. The Association resolved that members, who will not sign this contract shall be expelled from the Association.

After being presented to all members the agreement shows the signatures of 37 exporters, 5 members being unwilling to sign.

The contract reads, translated:

MUTUAL AGREEMENT

1. The undersigned (here follow the names of the 37 parties) all being professional nurserymen and or exporters of nursery stock, bind themselves mutually, not to ship any plants, of whatsoever nature, neither directly nor indirectly, to the United States of America or Canada, with the intention of having the same sold at public auction. They declare that they will have broken this agreement and will be considered having sent plants directly for sale at public auction when they should have any interest whatsoever, and or should participate either directly or indirectly in the shipment of plants to the United States of America or Canada for sale at public auction.

2. They bind themselves, to have forfeited the sum of five hundred guilders as a fine, whenever they should break this agreement and to pay this fine unto Mr. H. L. Maarsehalk, Notary Public, at Boskoop, the said Mr. H. L. Maarsehalk being hereby authorized to claim this fine in or out of court.

3. They authorize Messrs. P. M. Koster and C. Grootendorst, nurserymen, residing at Boskoop, or any other persons to be appointed by the parties to this contract, to publish the contents of this agreement translated into the English language, with the names of the persons who signed it or the names of the firms under which they do business, in the trade papers of the United States and Canada, in such manner as Messrs. Koster and Grootendorst afore-mentioned shall deem to be in the interest of those concerned.

4. The fine, after being collected by Mr. H. L. Maarsehalk, following a breach of contract, shall be divided by this party as follows:

One hundred guilders to be paid to the person producing evidence of the breach of this agreement, (whether this person is a party to this contract or not) and four hundred guilders to be divided equally among those who signed the agreement, with the exception of the one who did not live up to it.

5. This agreement is made for one year, and must be considered to remain valid for the same term, every year, unless any one, who signed it, informs one of the parties mentioned in clause 3 per registered letter, not less than

six weeks before the expiration of a term, of his intention to withdraw. Messrs. Koster and Grootendorst are then authorized to publish this withdrawal of signature according to their best judgment.

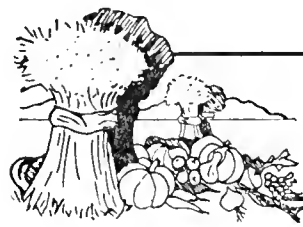
6. This agreement takes effect on the first day of October, 1916.

Declared as agreed upon and signed this sixth day of October nineteen hundred and sixteen. Was signed:

J. Blaauw & Co., Boskoop.
 Bulk & Co., Boskoop.
 J. Boer Gz. "East End Nurseries," Boskoop.
 Ebbinge & Van Groos, Boskoop.
 L. J. Endtz & Co., Boskoop.
 Felix & Dykhuis, Boskoop.
 Van Gelderen & Co., Boskoop.
 F. J. Grootendorst & Sons, Boskoop.
 Guldemon & Co., Boskoop.
 W. C. Hage & Co., Boskoop.
 Van Heiningen Brothers & Co., Boskoop.
 Hugo T. Hooftman, "Juliana Nurseries," Boskoop.
 Kallen & Lunnemann, Boskoop.
 C. van Kleef & Co., Boskoop.
 W. van Kleef & Sons, Boskoop.
 Kluis & Koning, Boskoop.
 A. Koloos & Co., Gouda.
 H. Koolbergen, Boskoop.
 M. Koster & Sons, Boskoop.
 Koster & Co., Boskoop.
 W. Mesman & Sons, Boskoop.
 Michelsen & Co., Naarden.
 J. Mossel, Boskoop.
 Ottolander & Hooftman, Boskoop.
 H. den Ouden & Son, Boskoop.
 Jac. den Ouden, Boskoop.
 As. Ouwerkerk, Boskoop.
 K. Rosbergen & Sons, Boskoop.
 Schaum & van Tol, Boskoop.
 Schortinghuis & de Jonge, Boskoop.
 Sliedrecht & Co., Boskoop.
 Jan Spek, Boskoop.
 Jac. S. Smits & Co., Naarden.
 Van der Weyden & Co., Mr. D. G. Wiegand Bruss, prop., Boskoop.
 Verkade van Kleef, Waddinxveen.
 Visser Brothers, Naarden.
 K. Wezelenburg & Son, Hazerswoude.

THE COMING CONVENTION

It seems a bit soon to begin talking about the convention in January when it does not take place until June, but when you come to think of it the convention only lasts a few hours at the most, and during those hours decisions are made which have a very important bearing on the nursery business. If the convention is to be really worth while the subjects that are brought before it should be considered by every nurseryman well in advance, and every one thoroughly prepared to endorse or condemn any proposition that may come up.



From the U.S.D. of A.

NEW INSECT ENEMY OF THE PEACH DISCOVERED

*Entomologists of the U. S. Department of Agriculture
 Make Find Near Washington—Believed to Have
 Been Introduced from Japan.*

An insect destructive to the peach and kindred fruits, believed to be new in the United States, has been discovered by entomologists of the U. S. Department of Agriculture in the District of Columbia and its environs. This insect, which in its adult form is a brownish moth and in its larval stage, a small white and pink caterpillar, attacks both the tender shoots and fruit, causing serious losses.

Because of the habits of the worm, the usual control measures, such as spraying with certain arsenates, will probably not be effective. The smooth young shoots, owing to their rapid growth, are protected by the poison solution for only a very short time after the spray is applied, and hence it is almost impossible to poison them. The entomologists of the Department who have been investigating the pest, will continue to study it in the hope of developing control measures.

WHAT THE INSECT IS

The insect, known to science as *Laspeyresia molesta*, is believed to have been introduced from Japan. So far as the Department's entomologists know, it has not been found in America other than in the District of Columbia, and in the adjoining territory in Maryland and Virginia. The specialists are desirous of knowing if the insect has attacked peach, plum, or cherry trees elsewhere in the United States.

The presence of the insect can best be determined in most cases by the nature of its injury to peach trees. It bores into practically every tender twig and causes new shoots to push out from lateral buds. These are attacked in turn, the abnormal stimulation of lateral growth producing a much branched and bushy plant. A copious flow of gum from the twig-ends often follows the attacks of the caterpillars.

INJURY TO FRUIT

In attacking fruit the young caterpillars generally eat through the skin at or near the point of attachment of the fruit stem. The larva, as it grows, makes its way to the pit, where it feeds on the flesh, which soon becomes much discolored and more or less slimy. Larvae entering at the side of the fruit are more likely to eat out pockets or cavities in the flesh.

The full-grown caterpillar spins a whitish silk cocoon in which to pupate. Moths emerge in the spring for egg laying by the time the shoots are well out.

The Bureau of Entomology, U. S. Department of Agriculture, especially requests owners of peach or other fruit trees to report the presence of this new pest in their

orchards. Specimens of twigs may be mailed wrapped in paper or, preferably, in a suitable box.

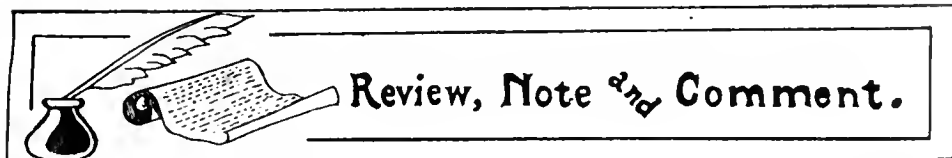
Note: The Bureau of Entomology is particularly anxious to receive reports as to the presence of this new insect in orchards so that it may determine whether it has spread beyond the region around the District of Columbia.

INSECT PESTS AND PLANT DISEASES DETECTED BY PLANT QUARANTINE OFFICIALS

One hundred and ninety-three different kinds of insects, which might prove hurtful to American crops and 116 plant diseases of similar significance, were detected by State and Federal inspection during the last fiscal year on plants and plant products offered for import into the United States, according to the report of the Federal Horticultural Board of the U. S. Department of Agriculture. Of the insects, 14 were scale insects such as pear scale, though they range from scales found on orchids, cocoanut, and bamboo, to other forms found on wistaria, camellias, hemlocks, and pines. In addition, nests of the brown-tail moth, egg masses of the European tussock moth, pupae of the dagger moth, cocoons of the pine sawfly were discovered.

SPRAYING FOR PEAR LEAF WORM

The pear leaf worm, an insect which does considerable damage to pear orchards, especially on the Pacific coast, is easily controlled by spraying. A contact spray is usually effective in controlling the insect in the larval stage, and should be applied when the blossoming period is about over and two-thirds of the petals have fallen. The following formula for a contact spray is given in a new professional paper of the Bureau of Entomology, U. S. Department of Agriculture: Fish-oil soap, 1 pound; water, 25 gallons; nicotine sulphate (40 per cent. concentrate), 1 to 1,200 parts of the spray. When the infestation is severe and promises destruction of the foliage, a poison spray, made of four pounds of lead arsenate to 100 gallons of water, should be used. The best time for applying this is when the holes in the leaves are not larger than one-half inch in diameter.



Dr. S. B. Fracker has been appointed acting state entomologist until a successor to Professor Sanders is appointed.

Dr. M. C. Tanquary, assistant professor of Entomology, Kansas State Agricultural College, who was granted a leave of absence in 1913 to accompany the Crocker Land Expedition has returned to the Kansas Agricultural College and will continue his work in the college and experiment station.

In California it is being agitated to create an office of

State Landscape Architect, to have charge of all the planning of the grounds connected with public buildings and state institutions. It is specified that the landscape architect shall be a university graduate in landscape architecture, with plenty of office and field experience and be not less than 30 years old and not more than 50.

The office will carry a salary of \$3,000 per year.

According to a circular letter issued by the New Zealand Association of Nurserymen there is considerable controversy in regard to Root Knot. The officers of the Agricultural Department destroy trees so affected, which does not always meet with the approval of the nurserymen.

Nurserymen are also attempting to come to an agreement in regard to prices.

Within the past ten years Australian fruit growing areas have increased by nearly sixty thousand acres. On account of the reverse seasons Australia imports large quantities of apples from the United States and Canada, but thus far the quantity of such fruit exported to America has been small, Europe having been the great market.

The Governor of Minnesota has allowed an emergency appropriation for the use of the State Entomologist for fighting White Pine Blister Rust in Minnesota, with the implied promise that more money will be available if necessary. The work has been pushed vigorously during the summer. Only two localities have been found in which the rust exists, and most vigorous methods of eradication are being pushed at these places. Nurseries of the state have been combed for other evidences of the disease, but it is believed that the two localities mentioned are the only places involved at the present time.

The Plant Pathology Division of the Minnesota Experiment Station is co-operating in an advisory capacity in this work, as well as the Bureau of Plant Industry, which is also aiding the work financially. Federal Inspector Pierce has made several trips to the state and taken part in various conferences. The Entomologist has had four to eight men in the field most of the time. One infection has been traced as coming directly from Wisconsin, which state received diseased trees from Germany. The source of infestation in the second locality where the disease was found, is believed to have been a European Nursery whose locality is not yet known.

WICK'S TREE DIGGER

I will not sell parts of my tree digger on a guarantee when used with the old fashioned tree digger as it has been proven that they pull twice as heavy as my digger. But I guarantee to dig as big trees as they do with the old fashioned digger, and only use two common sized horses, as shown on the cut in the advertisement.

Respectfully yours,

OSCAR WICK.

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EditorERNEST HEMMING, Flourtown, Pa.

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Nursery Stocks of all kinds. It circulates throughout the
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men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
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Hatboro, Pa., January 1917

PUTTING THE NURSERY BUSINESS ON A SCIENTIFIC BASIS

Science is *knowing*, Art is *doing*. The nursery business as yet is neither one nor the other. The best we can say in regard to it is, that it is merely a practice, and many will mentally remark, "a bad one," largely because the practice is not based on knowledge so much as exigencies, which produce the long train of evils such as over production, cut throat competition, low prices, lack of uniformity in business customs, etc.

John Ruskin says "The doing that makes commerce is born of thinking that makes scholars."

The one supreme effort in every line of business, is to put it on a scientific basis, and if the component parts of a business do not get together, and do it for themselves, the monopoly comes along and does it for them, crowding those who do not come into line to the wall.

We need to put the nursery business on a scientific basis, and the first step is to organize our knowledge by means of statistics to guide us in production and of costs to enable us to fix the selling price. If we organize our knowledge we shall soon be scientific nurserymen.

Many nurseries are getting along SKILLED LABOR very short handed. This may not be a very desirable condition, but it is proving to many that, perhaps at times, when there was an abundance of cheap labor it was not used to the best advantage, and if nurserymen would only take the lesson to heart, and at times when skilled labor is scarce reduce their production accordingly, they would find they would really be in pocket. It is quality rather than quantity in both labor and products that is wanted. It may be very fascinating to plant immense acreages and employ great quantities of unskilled help, but after all the results are naturally large quantities of poorly grown stock. We are too apt in America to try to do big things, but in the Horticultural World it is not the big things that count,

but the painstaking detail, in fact, the temperament of the horticulturist and nurseryman should really be fashioned along the lines in which his own plants grow. As everyone knows perfect plants are painfully slow in coming to maturity and require constant care and attention in training.

RISING PRICES

With the cost of labor so greatly increased, and everything else that goes in the production of nursery stock, it is simply out of the question to attempt to do business without raising the prices. The nurseryman need not be afraid that it will restrict the sales because his customers will hardly expect otherwise with every other line of goods soaring in price.

The advance should be reasonable and based, as near as possible, on the cost of production.

In addition to the higher cost of producing domestic stock, imported plants are likely to be scarcer and higher, due to the high cost and uncertainty of transportation.

Many consignments of box were abandoned at the wharf the past fall through arriving in poor condition.

PEDIGREE IN PLANTS

Prof. C. B. Waldron, Agricultural College, North Dakota, gave an informal talk before the Minnesota State Horticultural Society on December 8th on the subject of "Pedigree in Plants."

Prof. Waldron did not discuss the scientific aspects of the subject at all, but simply related the results of one of their recent experiments in which so-called "pedigree" strawberries, obtained from certain nurserymen, were planted along side of others upon which no claim was made. This work was started four years ago. In no case did the so-called pedigree plants head the list, in the matter of yield, and in most instances they fell considerably below the plants that did not lay any claim to long lines of distinctive ancestry.

Attention was also called to results obtained in Missouri where runners were taken for a period of twelve years from the highest producing and the lowest producing plants, respectively. At the end of that time it was found that there was no difference in the favor of the plot that had come through the line of high producers, as compared with the line of low producing plants.

He called attention to the work done in Missouri on apples, in which scions from two Ben Davis trees, showing the greatest contrast in matter of yield, size, etc., were used in grafting two sets of trees. The trees had borne three crops, and it was impossible to distinguish any difference on the average between the two different sets.

This would indicate that whatever the theoretical or scientific considerations may be, there is scarcely any warrant at the present time for claiming superiority for any strain of plants asexually propagated. Recognizing, of course, the existence of such a phenomenon as bud variation, but there is no pretention on the part of the nurserymen advertising pedigree plants that these alleged superior strains of fruit have arisen in that way. The claim is made that improvement has been made by ordinary selection and this claim so far is not substantiated.

PHILADELPHIA

The Convention City of the American Association of Nurserymen, June, 1917.



City Hall, Philadelphia

Philadelphia is, perhaps, richer in historic traditions and associations than any other city in our country. To the stranger within her gates as well as to the life long resident, Philadelphia offers a wealth of interesting relics and reminders of the times from the arrival of its founder, the good and benevolent William Penn, down through the stirring colonial days when our liberties were shaping, a work in which our forefathers took a high and active part, and drew the eyes of the whole world to the city.

The visitor who comes to Philadelphia cannot fail to absorb something of the spirit of the mute but potent re-

mains of epoch-making days that crowd thick on every side, and to carry away a higher veneration for the city which was the Ark of Freedom, and its majestic symbol, the Liberty Bell.

Carpenters Hall, where the First Continental Congress met, and Independence Hall, where the Declaration of Independence was signed, are usually the first objective of the visitor, and one can easily reconstruct in one's mind the scenes and men that so vitally and sturdily animated and upheld the great principles of liberty for which they strove and fought and died.

Courtesy of Publicity Bureau, Philadelphia Chamber of Commerce.

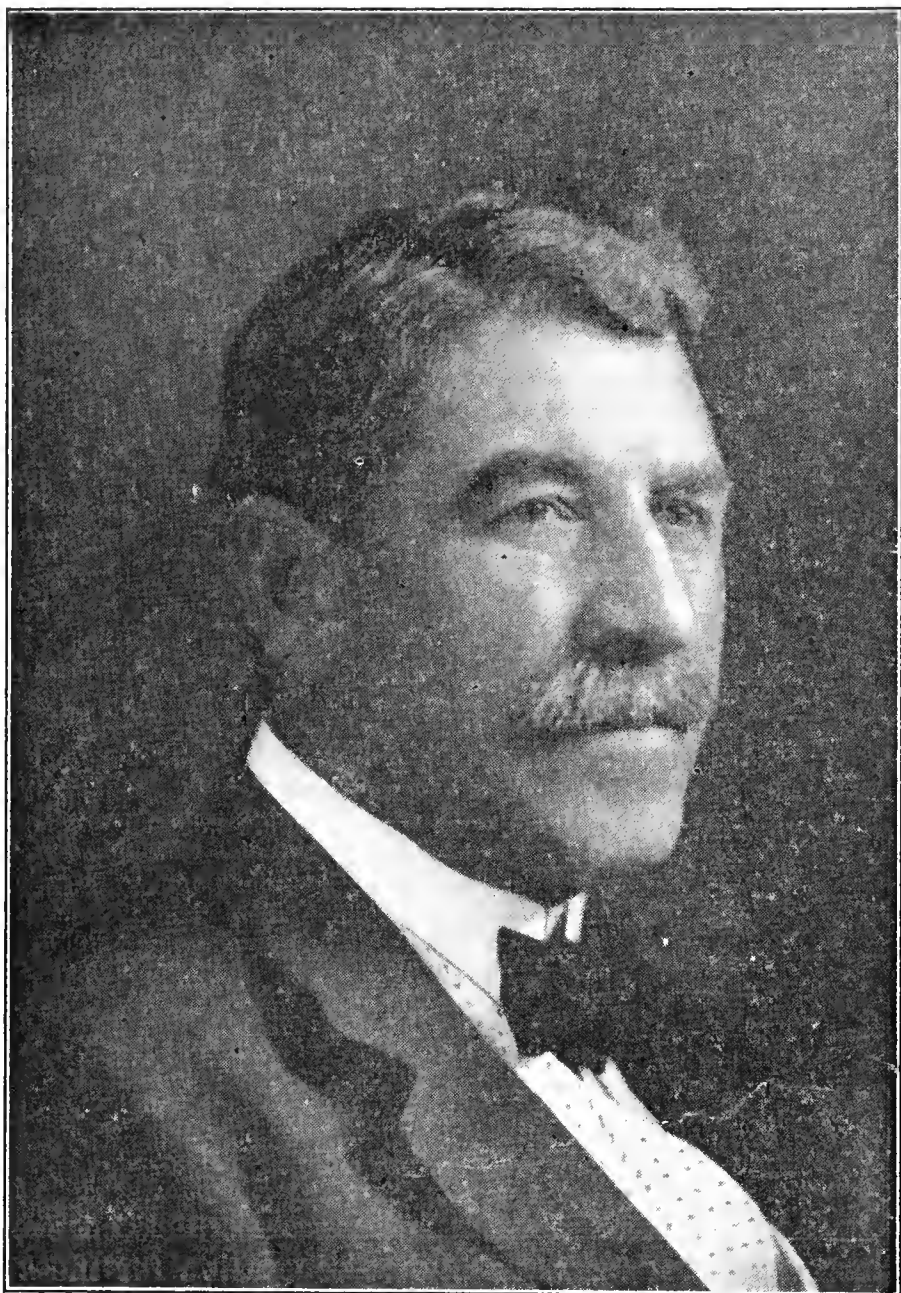
Obituary.

WILLIAM C. BARRY.

Following a brief illness, William Crawford Barry, President of the Ellwanger and Barry, Inc., Mount Hope Nurseries, Rochester, New York, died at his home, December 12th.

Mr. Barry was the son of Patrick Barry, the famous nurseryman, editor and author, who in company with George Ellwanger, founded the present well-known firm of Ellwanger and Barry in 1840, and who did so much to make Rochester a city of nurseries.

The late William C. Barry was a worthy son of his



father. He was born September 17th, 1847, and practically grew up in the nursery business.

For a number of years he was tutored at home. Later he entered Seton Hall College in New Jersey, which at that time was conducted by Rev. Bernard J. McQuaid, later the first bishop of Rochester diocese. After completing his studies in the New Jersey college, Mr. Barry was sent to Europe, where he studied for two years in Heidelberg and Louvain. Upon his return to Rochester

he took up the work of the great horticultural business founded by his father.

Perhaps Mr. Barry's greatest service was rendered to Rochester when he served as a park commissioner. He was one of the original members of the Park Board, organized in 1884, and he served until it was abolished in March, 1915, most of the time as vice president of the organization. To no other one man does Rochester owe more for the intelligent development of its parks.

Mr. Barry gave to his work as park commissioner, unselfishly and without stint, his business talents and splendid horticultural knowledge. During all the years he was a member of the commission, he was chairman of the Highland Park committee. Highland Park became city property through the generosity of the firm of Ellwanger & Barry, and while that park naturally received much of Mr. Barry's attention, his broad knowledge and equipment made his advice most valuable in all Park Board matters.

Besides the nursery business Mr. Barry had many other interests. He was an officer and director of the old Flower City Bank for many years, his connection with that institution continuing until its merger with the National Bank of Rochester in 1906. He was a pioneer in the street railroad business of Rochester, being a director in the old Rochester City and Brighton Railroad, one of the most prosperous city roads in the country at the time. Later, after the merger of all the Rochester lines, Mr. Barry was a director for many years in the Rochester Railway Company and the Rochester and Suburban Railroad Company. He was president of the Rochester Trust and Safe Deposit Company and vice president of the Lincoln National Bank, and a trustee of the Monroe County Savings Bank.

From the time of its organization Mr. Barry was a charter member of the Rochester Chamber of Commerce. He served for many years as a trustee of that body and did much public service on its various committees. Mr. Barry was liberal of spirit, interested in the welfare of Rochester, and always a leader in civic enterprises.

The many resolutions adopted by his business associates speak highly of the love and esteem with which he was held.

Bishop Hiekey, who officiated at his funeral said:—

"To-day not only a parish, but a whole city mourns the loss of a Christian man, William C. Barry. The church asks that we pray for the dead and may you all do so at this time.

"There was a distinguishing mark of our departed brother, his intense faith. His faith in the hour of his death was a virtue. As a child it was ever the same. This is a gift we all might pray to have.

"It was that faith that guided him everywhere. He was, first of all, a man of God. From the teaching of his church he was a high priest of the layman. He carried his faith into his family and business life and to know that William C. Barry was interested in anything was to fill one's trust in it.

"By his industry and talents he rose to prominence. His honesty was a watchword in the community. I speak to-day, not only because of a personal love, but I believe it is good for the world to hear it, and I pray God his life may stir others to a life as

well lived, and I pray God to bring him home to that reward he so justly earned.

"May God grant peace and rest to him eternally."

Personally, Mr. Barry was a man of democratic manners, affable and always approachable. He had a distinguished presence, dignified yet kindly. He was numbered among the most charitable and philanthropic men of Rochester, as well as among the most public spirited. Mr. Barry was prominent in Rochester social circles and was a member of the Genesee Valley and Country Clubs.

Mr. Barry leaves three sons, William C. Barry, Jr., Arthur A., and Frederick G. Barry; a daughter, Mrs. Charles H. Stearns, of Mt. Hope avenue, and a sister, Mrs. Bernhard Liesching. Mr. Barry's wife, Mary Louise Gaffney Barry, whom he married on February 11, 1874, died nearly five years ago.

BULLETINS OF INTEREST TO NURSERYMEN

Published by the U. S. D. of A., Washington, D. C.

The Grape Leaf-Folder. By J. F. Strauss, Entomological Assistant, Deciduous Fruit Insect Investigations. Pp. 16, pls. 4, figs. 6. Contribution from the Bureau of Entomology. Nov. 9, 1916. (Department Bulletin 449). Price, 5 cents.

Describes life history and habits and suggests methods of control of this insect.

False Blossom of the Cultivated Cranberry. By C. L. Shear, Pathologist, Fruit-Disease Investigations. Pp. 7, pls. 4, figs. 2. Contribution from the Bureau of Plant Industry. (Professional Paper). Nov. 25, 1916. (Department Bulletin 444). Price, 5 cents.

Is of interest to plant pathologists and to cranberry growers, especially in the States of Massachusetts, New Jersey, Wisconsin, and the coastal regions of Oregon and Washington.

The Cottonwood Borer. By F. B. Milliken, Scientific Assistant, Truck-Crop and Stored-Product Insect Investigations. Pp. 7, pl. 1, figs. 3. Contribution from the Bureau of Entomology. (Professional Paper). Nov. 9, 1916. (Department Bulletin 424). Price, 5 cents.

Describes life history and habits of this insect and suggests methods of its control.

The Apple Leaf-Sucker. By B. R. Leach, Scientific Assistant, Deciduous Fruit Insect Investigations. Pp. 16, pl. 1, figs. 6. Contribution from the Bureau of Entomology. Nov. 25, 1916. (Department Bulletin 435). Price, 5 cents.

This bulletin will be found of value to apple growers in the North and Central Atlantic States, the Middle West, and portions of Canada.

THE R. M. TEAGUE NURSERIES

Mr. R. M. Teague, Los Angeles, California, has organized and incorporated the R. M. Teague Citrus Nurseries—taking over the business of the San Dimas Citrus Nurseries of which Mr. Teague was the sole owner.

BOOK REVIEW

A BOOK OF GARDEN PLANS

A Book of Garden Plans, by Stephen F. Hamblin, is published by Doubleday, Page & Co., Garden City, N. Y.

The book is rather an unusual one as it contains 20 blue print plans and planting lists for each, and photographs to illustrate the basic idea.

The author has not aimed to offer ready made plans that would fit all properties and conditions but rather to illustrate how a landscape architect would meet definite conditions.

The lists are evidently especially adapted for northern planting, and on the whole may be considered safe, as they are composed of plants easily procurable and of kinds that grow very readily.

Plans and lists are also given for special features, such as Rose Garden, Wild Garden, Natural Rock Garden, Water Garden, etc.

The book is beautifully gotten up and sells for \$2.00 net.

FERTILIZERS

The MacMillan Company, 66 Fifth Avenue, New York, have published another book that is an important addition to their Rural Science Series.

It is on the subject of Fertilizers, by E. B. Voorhees, revised by John H. Voorhees and edited by L. H. Bailey.

As everyone knows, soil fertility is the one great underlying act of all agricultural and horticultural operations. It is what capital is to the banker. It not only must be there but it must be active and available.

Fertilizing is the ever present problem and this work should do much to help each individual to solve his own. It is practical in every sense of the word, at the same time bringing the knowledge and science of the chemist and professor within the grasp of the practical farmer, and horticulturist, so he can apply it to his own profit.

The price of the book is \$1.50 and should be a good investment to all who work the soil.

THE PRUNING MANUAL

Very likely the mental attitude of the average nurseryman towards a new book on the subject of pruning will be one of indifference.

If such is the case it will be the nurseryman's loss. The writer has to personally plead guilty to a feeling of boredom when the Pruning Manual by Prof. L. H. Bailey came to his desk for review. This however did not last longer than it took to look into its pages.

The work is really the eighteenth edition of the Pruning Book revised and reset, which was first published in 1898.

It will prove to the practitioner who will read it there is progress in the knowledge of our profession as well as in others.

Like all of the author's works it is very practical and

wonderfully comprehensive and thorough.

To the student it gives the "why," to the practical man it presents lists, alphabetically arranged of most of the plants grown in nurseries, and tells how and when to prune each kind.

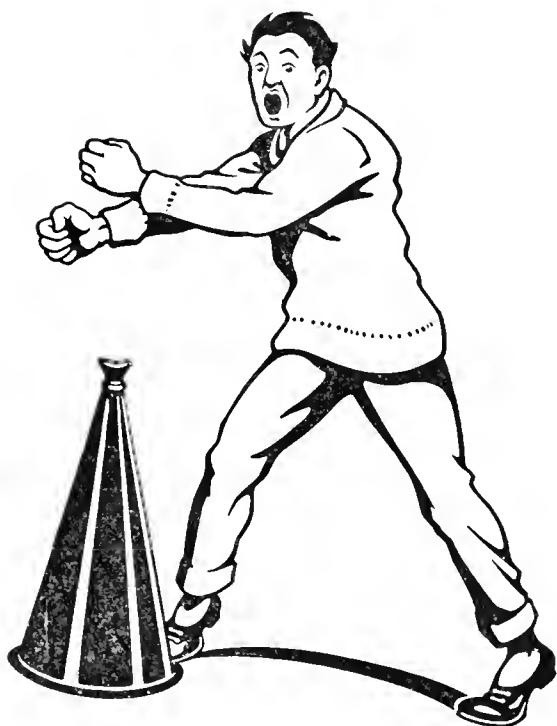
The specialist is not overlooked, for it gives full information of modes and methods of the pruning and trimming of fruit trees, etc.

It is published by The MacMillan Co., 66 Fifth avenue, New York. Price \$2.00.

Joseph Meehan, who we believe has more practical knowledge of the *Gordonia* than any other man in the United States, says "I have seen seed vessels on the *Gordonia pubescens* so often that they were no curiosity, but never saw a seed in any one of them. I would not be quite sure just what the seeds look like, but presume they are somewhat similar to those of the Camelia and Stuartias, which belong to the same natural order, hence I expect those of *Gordonia* to look somewhat like the roundish seeds of the Honey Locust. There should be no scarcity of plants, as it is very easy of propagation from either cuttings or layers. My beautiful plant is cutting raised. The past year it had over a thousand flowers on it.

Referring to its hardiness, it has proved hardy at the Arnold Arboretum at Boston. Ten years ago Jackson Dawson showed me some plants he had rooted from cuttings, models of good health."

Rah! Rah! Rah! Phil-a-del-phi-a!



It is not too early to commence to "root" for the Philadelphia Convention. Think about it now, get it fixed in your mind that you are going to Philadelphia in June.

SEEDLING "FRANKLIN TREES"

Those who know *Gordonia pubescens* (or "Franklin Tree," as it is sometimes called) and have seen the flowers of this most rare and beautiful tree, will be much interested to know that specimens in the vicinity of Philadelphia have produced fertile seeds, and that young plants have been successfully raised from them.

Judging from reports of several well-known horticulturists, this is quite a rare occurrence, at least in recent years.

It was in June of 1913 that the writer discovered seed-pods on the tree growing on the estate of W. Hinekle Smith, Bryn Mawr, Pa. (I say "the" tree because of the very few that are as yet seen on grounds); on being apprised of the fact that his tree was likely to mature seed, Mr. Smith had his gardener keep a sharp eye on the seed-pods to see if fertile seed would develop. Such fortunately proved the case, and we are glad to record that as a result of "watchful waiting" a number of young, thrifty one-foot plants may now be seen in 5 inch pots at "Timberline," Mr. Smith's interesting estate.



Gordonia pubescens
By the kindness of Thomas Meehan & Sons,
Philadelphia, Pa.

Simultaneously with the finding of seed at Bryn Mawr, we also found some plump pods on the specimen at "Compton," Chestnut Hill, Philadelphia, the grounds of John T. Morris. We understood young plants have also been raised from the seed that matured.

The fruit of the *Gordonia* is a five-celled capsule, and while much smaller in size, closely resembles the seed-pod of an *Althæa* or *Hibiscus*, but unfortunately it does not contain a like quantity of seeds.

Following out the truths propounded by Mr. Joseph Meehan on the question of the increased hardiness of seedlings from northern gathered seeds, we may yet look for the *Gordonia* to live and thrive much farther north than has yet been recorded.

The demand for the tree far exceeds the supply; one Philadelphia nursery has orders booked for a year or more in advance of being able to fill them. Like many other good things, its rarity makes it much desired.

It has been the usual practice to raise young plants from half-ripened wood in July and August. It is not an easy subject to handle by this method, however, and

moreover it is about three years before the plants are salable.

Even then it is rather risky to plant it out except in a very favorable position, for unless the wood is well ripened and hardened, you are likely to have it winter-killed.

The plants that have proved the most successful have been those that have been layered and rooted while on the parent plant; the wood in this case is well able to stand the most severe winters.

It will be interesting to know if others have also been fortunate in raising seedlings of this rare tree.

EDWIN MATTHEWS, in *Florists' Exchange*.

MT. ARBOR NURSERIES ARE INCORPORATED

The Mount Arbor Nurseries are incorporated with an authorized capital stock of \$300,000.00 with a paid up capital stock of \$200,000.00. The officers of the corporation are E. S. Welch, president; E. E. May, vice president and treasurer; R. M. Gwynn, secretary; F. W. Welch, superintendent and R. N. Adair, assistant superintendent.

The purpose of incorporating the Mount Arbor Nurseries is to perpetuate the business and secure the advantages of the corporate form of organization. Its president, E. S. Welch, can look back over a quarter of a century of business success, unparalleled in the history of the nursery business in the United States.

The Mount Arbor Nurseries were established in 1875 and came into the hands of E. S. Welch in the spring of 1891. It has grown from an embryo plant into one of the largest nurseries in the United States.

The rapid growth of the business has been possible partly because of the favorable conditions and soil for the growth of nursery stock, but more especially because of the efficient management of the business.

Since 1891 and until the present date the business has been owned and managed by E. S. Welch. As to how well he has succeeded can only be measured by the large volume of business that has been developed.

E. E. May, vice president and treasurer, is a Nebraskan by birth, graduated from the State University of Nebraska and was employed for four seasons in the sales department of D. M. Ferry & Co., of Detroit previous to locating at Shenandoah. He helped organize and was superintendent of a county high school in western Nebraska two years, and is well qualified for his duties in the new corporation.

R. M. Gwynn, secretary, has been actively connected with the management of the business for the past seven years. He was formerly cashier of the Shenandoah National bank, is a director in the Home Building and Loan Association, and well qualified to handle the many duties of the secretary of a large business.

F. W. Welch, superintendent, has had active supervision of the nursery plant for many years. He has been engaged in the production and handling of nursery stock since boyhood, and has been actively allied with the Mount Arbor Nurseries during the greater part of his business career.

Robert N. Adair, who has grown up in the business, is assistant field superintendent. Mr. Adair is a very capable and energetic man and has rendered valuable assistance in the development of the business.

THE GROWING OF A NORWAY MAPLE

The seed of the Norway Maple ripens along in early fall. Sometimes the seed is purchased from the seed dealer but it is always better for the nurseryman to gather his own. He then may select to a large extent the type of tree he prefers. There are many different types, and the seedlings will always more or less perpetuate or have characteristics of the parent plant.

The seed should be sown very soon after it is gathered, while it is quite fresh, as it soon loses vitality unless extra precautions are taken. As in all other crops it always pays to well prepare the seed beds. The seed should not be sown too thick, because practically every one will germinate and if they are too thick the young plants will be weak and spindling. The first year if sown in the fall, as advised, the seed will be in the ground and in position to take advantage of the spring growing weather.

The first year's growth will vary from six to eighteen inches according to the conditions of soil and moisture. There is nothing to do to them except keep the weeds cleaned out. The second year the stand of seedlings should range from one to two feet and the third year from three to four feet.

After they have made the third year's growth in the seed beds, they are in condition to dig up, grade and have in readiness to plant where they will get more room. Many nurserymen transplant direct from the seed bed to the nursery rows. While this may be the easiest method, it does not mean it is the best, better results, and perhaps even more economical, can be obtained by bedding them for a couple of years, that is, transplanting them in beds of well prepared soil, setting the plants three or four inches apart. This treatment has a tendency to make the young plants grow straight and tall. After being two or three years bedded out, they should be in prime condition for planting in the nursery rows. It is at this stage that nurserymen often make the mistake in not being more particular in grading and throwing out the culls and unpromising plants. It is well known the Norway Maple is a crooked tree in its young state, due to their losing their terminal buds. If, however, the growth is clean and otherwise unchecked, the crooks caused by the dying of the terminal bud are soon obliterated and the tree becomes perfectly straight by the time the caliper reaches two to two and a half inches. It is only the serious faults such as neglected double leaders, wounds and delayed or unskillful pruning that causes the culls, which are so expensive and finally land on the brush pile.

In planting out permanently in the nursery rows, it is well to set them a good distance apart, and if possible plant them so they can be harrowed both ways. When one comes to look back over the life history of a Norway Maple on the nursery and realizes that it has to be grown anywhere from seven to ten years before it finds its way on the market, and then looks at the price at which they are listed in the nurseryman's catalogue, it makes one wonder if it is a profitable crop, and if one would not get more if he grew eight to ten crops of corn on the same ground.

HAIL INSURANCE

The following letter has been mailed to approximately 2000 nurserymen and florists, together with a question blank to be filled out.

It is strongly urged that everyone promptly comply with the request as it is only by getting together this essential data will the committee be able to decide if the movement is feasible and that it will receive support to insure success.

COMMITTEE ON HAIL INSURANCE AMERICAN ASSOCIATION
OF NURSERYMEN.

Nursery, Missouri, December 7, 1916.

Dear Sir:—

The undersigned Committee has been appointed by the President of the American Association of Nurserymen to look into the question of organizing a Nursery Mutual Hail Insurance Association along the lines of the Florists Hail Association.

Hail storms occur annually in various sections throughout the United States and where they strike a nursery plant, they usually play havoc with nursery products. The past year has produced a number of these disastrous storms and the losses sustained by the nurserymen so unfortunate in having such storms strike them, suffer an irreparable loss.

The Florists Hail Association is a mutual organization. They help each other in their losses and if it were not for this Association many of the florists to-day would be hopelessly ruined.

The Committee desires to have you answer the questions asked on the accompanying report blank to the best of your ability and return it to the undersigned Chairman at the earliest possible moment before January 1st. This Committee will meet together in Kansas City previous to the Western Association meeting and will report our findings at that meeting as instructed by the American Association. If the reports indicate it will be feasible, we will at once take the necessary steps to incorporate and try to get the Association in working order by March 1st, so that the year 1917 may see the Nursery Fraternity protected from these unavoidable losses.

It will depend upon you and your report and the number found interested as to the success or failure of this Hail Association, so it is very important that you make a prompt reply of some kind, on or before January 1st.

Awaiting your early reply, we are,

Yours very truly,

FRANK A. WEBER, Nursery, Mo., Chairman.
F. H. STANNARD, Ottawa, Kansas,
E. P. BERNARDIN, Parsons, Kansas,
M. MOSS, Huntsville, Alabama,
H. A. SIMPSON, Vincennes, Indiana.

E. W. Townsend, President of the Square Deal Nursery, Salisbury, Maryland, writes us:—

We have had the best fall business in many years or probably ever had. Many of our customers began to draw on us early in September, and the business has increased every month. December finds us loaded with orders and loading cars of plants now for California trade.

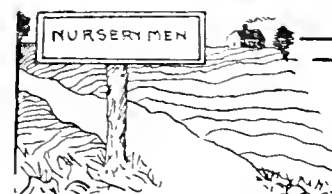
It now looks indeed like there will be a famine in nursery stock this season, especially is this true with straw-

berry and other small fruit plants. The season 1916, was not a very favorable one for the nurseryman as a whole and especially so on small fruit plants. Hence many growers cut their plantings. Dry weather in many sections cut the crop short, and all together there is the shortest crop of small fruit plants for years, in this locality.

We feel sure at this writing that we shall be able to clean up well this season, and get a fair price for our stock. We have been blessed with a fine growing season here on the "Eastern Shore" of Maryland, and we set an extra large acreage to strawberries, and have as fine a crop as we have ever grown.

While we do not claim any fore knowledge in this preparedness of ours, we certainly do feel proud of our this season's crop of plants, and also in the way that we are selling them. We also sympathize with the fellows who are not so well prepared.

Scarcity of help, in the way of common labor, is the greatest draw back with us. Many of our citizens have left our locality and gone north to work in the munition plants, where they can get much more money than we have been able to pay them on the farms. However, we expect to be able with the help of the women, to get along just the same. While we have been able to keep war on the other side we have all learned something from this great war, and something which we shall not soon forget. Many of us have learned to live and do without things that we did not think a year ago we could get along without. And the end is not yet in sight.



Business Movements.

Several of the Dansville nurserymen have combined and are doing business under the name of the Dansville Associated Wholesale Nurserymen.

By consolidating their lists they expect to greatly facilitate buying as they will be able to supply a very complete assortment of fruit trees.

The personnel of the Association is composed of C. W. McNair, president; F. H. Young, vice president; F. M. Hartman, secretary; H. G. Hartman, treasurer; N. W. Uhl, E. H. Maloney.

A plantation of nut-bearing trees has been made by the State College of Forestry at the Chittenango Forest Station 20 miles east of Syracuse. The results of the plantation show that many species of nut trees will thrive well in Central New York. Small English Walnut trees have withstood the severe drought of the past summer and have made remarkable height growth. The English Filbert, which is being tested in comparison with the native Hazel, has also made good growth and doubtless will prove valuable for general planting, especially where hedges and low-growing windbreaks are desired which at the same time will give fair returns in edible nuts. Some of the improved chestnuts have grown fairly well, but on account of the danger of the chestnut Blight these species do not seem to have a good future in Central New York.

THE MOST USEFUL GARDEN TOOL

IN answer to your query which tool or machine I consider the best, my answer is: Planet Jr. single wheel hoe.

Of course I have no use for a powerful tractor, threshing machine or twine binder, and as I am not on the Somme front in France, I have no use for a "tank," but like thousands of others I have a garden and have to furnish the power and labor to keep it clear of weed and in thorough cultivation.

Three years ago some of my friends presented me with a large wheeled garden plow, but it was never satisfactory. It took too long to change tools and was too much of a man-killer. Last spring I bought a Planet Jr. single wheel hoe with plow and cultivator attachments. I did not think there could be such a difference in time and labor saved over the old-time hoe. If the ground is in good condition I can do more work now in an hour than

see fruit and vegetables growing under glass. This has particular importance because certain varieties which are grown in the open in the southern Provinces will not mature in the northern excepting under warm shelter.

The development of large nurseries is also an innovation in some parts of Groningen and Friesland, and they are constantly increasing in number.

A great stimulus to horticulture has been the increased price of garden products since the war began. Tender vegetables, like tomatoes, beans, and cucumbers, which can not be grown successfully in the north except under glass, are now sold there at prices higher by 100 to 300 per cent than before the war. Cabbages and other outdoor vegetables sell at similarly advanced prices. Fruits have increased in price—not in so great a degree as vegetables, but sufficiently to stimulate production.—*Commerce Reports*.



—Courtesy S. L. Allen & Co., Philadelphia.
Every man with a garden, large or small, should have a Planet Jr. Wheel Hoe.

I could in four hours the old way. It takes a swath a foot wide, kills all the weeds, cultivates and dry mulches all at one operation. You change from one tool to another in a minute and as there are no nuts to take off or lose, it is a money-saver. In working young corn, beans, etc., you can hoe right up to within an inch without disturbing the roots and destroy every weed. You can take one of the cultivators and lay off your ground in rows for planting.

But what is the use of writing a long story when it can all be said in a few words: It kills the weeds; it cultivates; it mulches; it saves time; it saves labor; it makes work a pleasure and gardening a joy. And in my opinion every man with a garden, large or small, should have one.—W. L. LINNEY, Clarke County, Ind.

HORTICULTURE ADVANCING IN THE NETHERLANDS

Horticulture has made notable progress in the Amsterdam district during recent years. This is especially true of the northern Provinces. Ten years ago, in Groningen, only here and there could a hothouse be seen, but now in practically every village of that Province one may

According to the United States Census report on Agriculture for 1910:

NURSERY PRODUCTS. The total number of establishments east of the Mississippi River producing nursery products valued at \$250 or over in 1909 was 1357; total value of the products, \$11,163,644; average value of the products \$8,228. The total number of the farms or establishments east of the Mississippi River producing nursery products valued at less than \$250 in 1909 was 1814; total value of products, \$213,619; average value per farm or establishment, \$119.

FOR SALE

OLD ESTABLISHED NURSERY FOR SALE

As I want to retire from business, I will sell besides the land, all nursery stock and implements. This nursery is located in the Northwest in one of the best business localities of this country. Address:

Z. W. S., Care "The National Nurseryman."

WANTED

WANTED—Working Foreman, familiar with planting, budding, and handling help. Must be a good worker. Chance for advancement. Address, giving full experience, wages wanted, to

FOREMAN,

Care of National Nurseryman, Hatboro, Pa.

WANTED—A position as Superintendent with a reliable nursery company growing evergreens, ornamentals, and shrubs. If you need a man capable of producing the goods address

Superintendent, care of The National Nurseryman.

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American Nurserymen's Protective Association—President, Irving Rouse, Rochester, N. Y.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.

American Retail Nurserymen's Protective Association—President, H. W. Marshall, Arlington, Nebraska; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.

Association Oklahoma Nurserymen—President, P. W. Vaught, Holdenville, Okla.; secretary, Jim Parker, Tecumseh, Okla. Next meeting during week of State Fair at Oklahoma City, last of September or first of October.

California Association of Nurserymen—President, John S. Armstrong, Ontario. Secretary, H. W. Kruckeberg, Los Angeles, Cal.

Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.

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Idaho Nurserymen's Association—President, Anton Diedricksen, Payette, Idaho; secretary, J. F. Litooy, Boise, Idaho. No definite time has been set for next meeting. Probably in July at Boise, Idaho.

Massachusetts Nurserymen's Association—President, G. Howard Frost, West Newton, Mass.; secretary, Winthrop H. Thurlow, West Newbury, Mass.

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New York State Nurserymen's Association—President, E. S. Osborne, Rochester, N. Y.; secretary, H. B. Phillips, Rochester, New York. Next meeting September. Probably at Utica.

Ohio Nurserymen's Association—President, T. J. Dinsmore, Troy, Ohio; secretary, W. B. Cole, Painesville, Ohio.

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Pacific Coast Association of Nurserymen—President S. C. Miller, Milton, Oregon; secretary-treasurer, C. A. Tonneson, Tacoma, Wash. Place of next meeting to be decided later.

Pennsylvania Nurserymen's Association—President William Warner Harper, Philadelphia. Secretary, Henry T. Moon, Morrisville, Pa.

Southern Nurserymen's Association—President, Harry Nicholson, Winchester, Tenn.; secretary-treasurer, O. Joe Howard, Pomona, N. Carolina.

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Western Association of Nurserymen—President, Lloyd C. Stark, Louisiana, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

WANTED

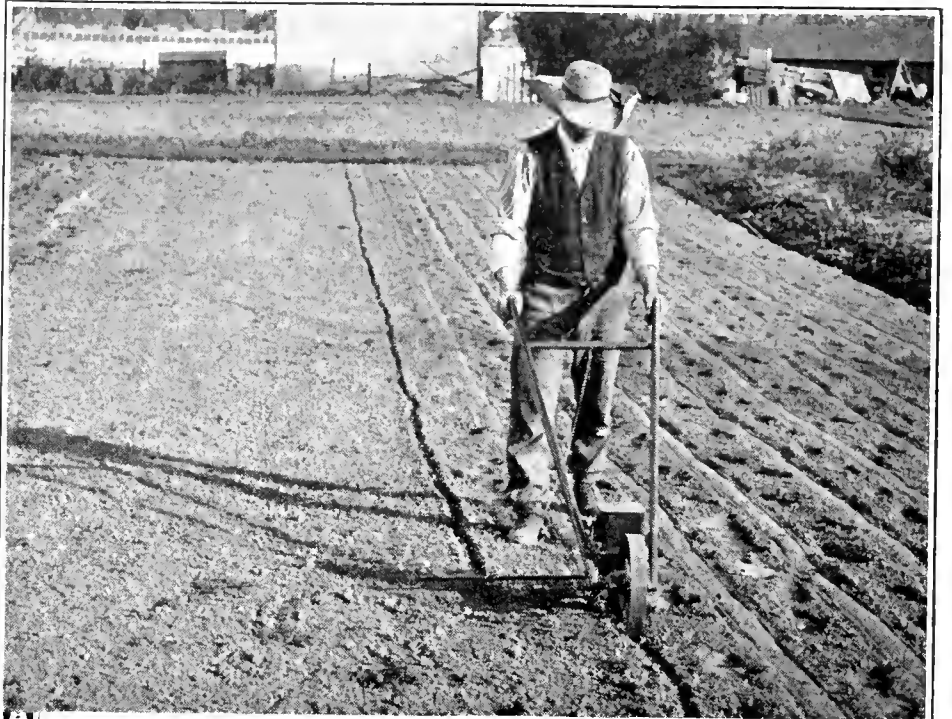
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These Tools Enable You to Cultivate Triple the Acreage

They are so scientifically constructed that they do 3 to 6 times the work of old-fashioned tools in the same time; or they do the same work with one-third the labor. They promote more luxuriant growth because they do more thorough cultivation; and they do it quicker and cheaper.

Planet Jrs. are the product of over 45 years actual experience in tilling the soil and in manufacturing implements to fill practical needs. Fully guaranteed.

Planet Jr.

Garden Implements

No. 4 Planet Jr., Combined Hill and Drill Seeder, Wheel-Hoe, Cultivator and Plow does the work so quickly, easily and thoroughly that it pays for itself in a single season. Sows all garden seeds (in drills or hills) plows, opens furrows and covers them, hoes and cultivates all through the season.

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Illustrates tools doing actual farm and garden work and describes over 70 different Planet Jrs., including Seeders, Wheel-Hoes, Horse-Hoes, Harrows, Orchard-, Beet-, and Pivot-Wheel Riding Cultivators. Write for it today!

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All standard varieties. We are located in the largest strawberry center in the world and have the soil and climate to produce the best of strawberry plants. California Privet, Apple trees, Asparagus roots, etc., in large numbers. Before placing order elsewhere, submit to us your want list, for prices. Stock guaranteed first class, true to name.

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Large assortment of Tree, Shrub and Fruit
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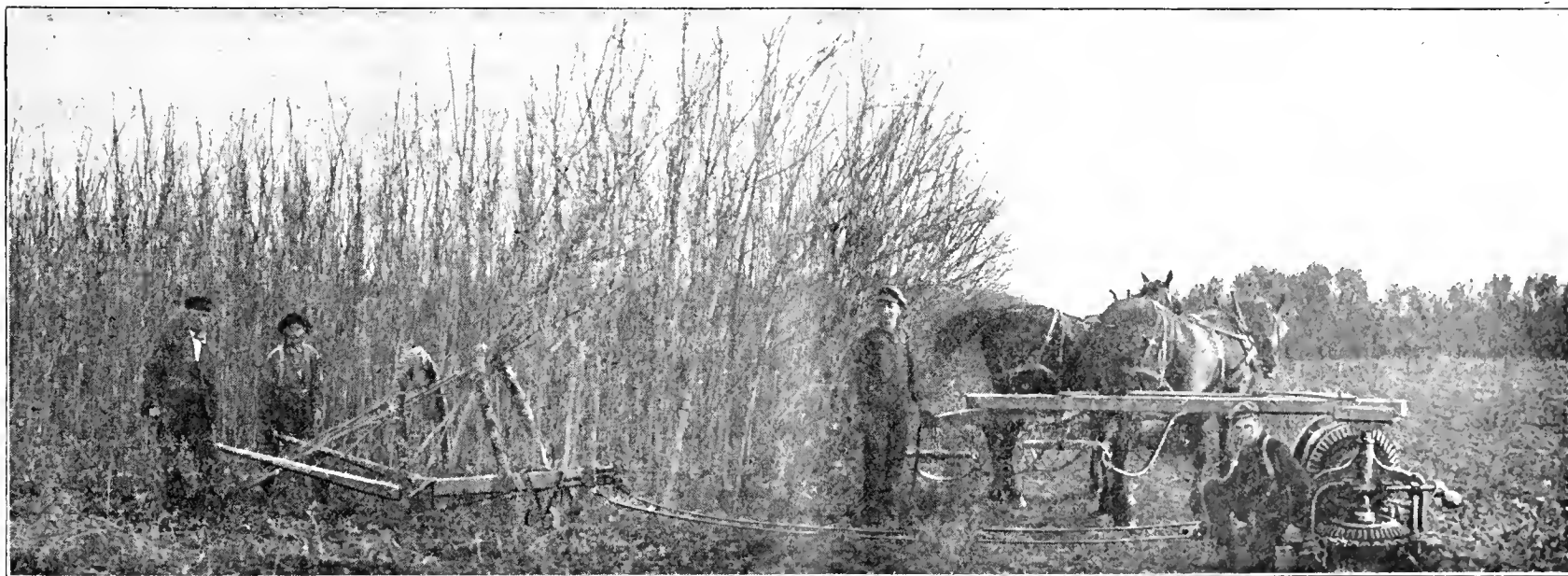
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A limited number of Potatoes offered for sale at \$6.00 per dozen.



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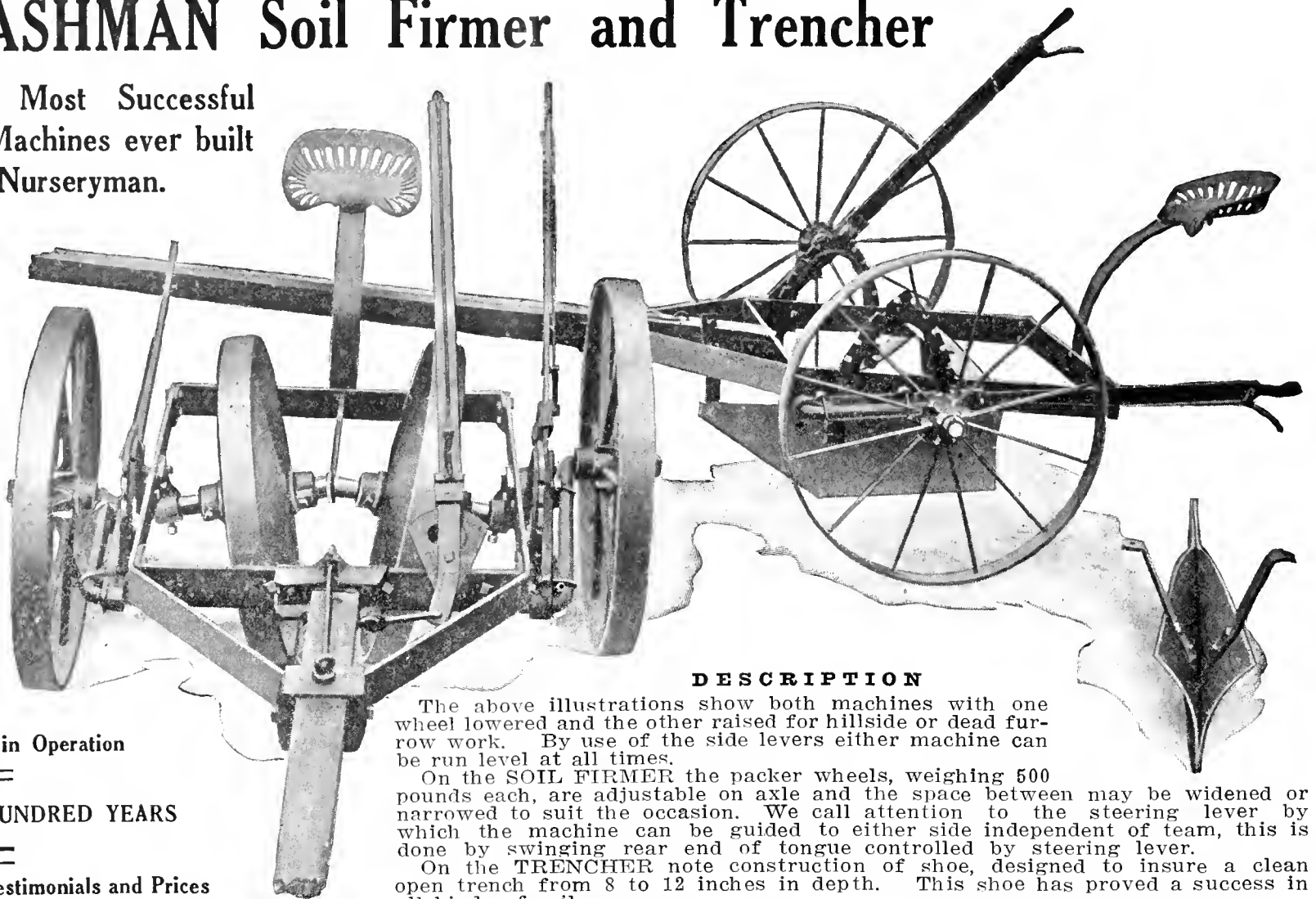
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On the SOIL FIRMER the packer wheels, weighing 500 pounds each, are adjustable on axle and the space between may be widened or narrowed to suit the occasion. We call attention to the steering lever by which the machine can be guided to either side independent of team, this is done by swinging rear end of tongue controlled by steering lever.

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Ornamental Shrubs

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Write us for quotations

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 2 1/2-inch Pots

THE LEEDLE FLORAL COMPANY®
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4-inch
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 Our **MR. JOS. LUNNEMANN**, with headquarters at 14 Stone
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 New additions constantly being tested. Ask for complete descriptive catalog, and wholesale rates. 34th year.

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First class service with the minimum cost
 Every Nurseryman should own one
 Can make prompt shipment at all times
 Manufactured by **AL. K. FEIGLY,**
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If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine **PROGRESSIVE** Everbearing plants, guaranteed to be **TRUE TO NAME** and handled so as to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

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Own Root Field Grown

Jan., Feb., March Shipments

Write for full list and prices

HOWARD ROSE CO., HEMET, CAL.

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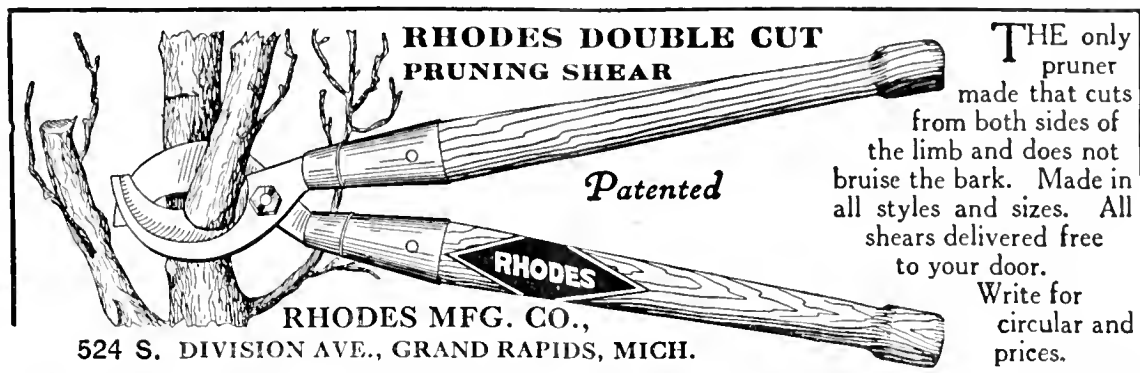
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ORNAMENTAL BULBS, PLANTS, and TREES

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FOR SALE

We offer for sale, half or whole interest in Northern Nut tree Nursery containing about 30,000 choice, hardy pecan stocks and 12,000 hardy black walnut stocks, all of right size for budding and grafting next spring. Also propagating wood from 150 English Walnut and 250 Pecan trees, from two to five years old, for budding and grafting this stock. Varieties: **Indiana, Busseron, Major, Hinton, Greenriver, Stuart, Money-maker**, and a few trees from buds this season of **Posey, Niblack** and **Butterick** pecans.

This nursery is located in Virginia, near freight and express office, convenient to two large cities and in a section where pecan growing is successful. Present owner could lend co-operation in propagating and selling, if desired.

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Get our prices before placing your order.



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A limited supply in each grade yet unsold. Shipments in December or later.

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Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

Sarachan & Rosenthal

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If its a hardy perennial or so called old fashion flower worth growing, we have it in one shape and another the year round. We have the largest stock in this country, all Made in America, and our prices—

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Place your order NOW before supply is exhausted.

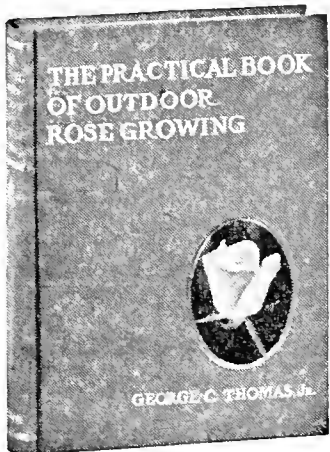
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As a practical working manual for outdoor rose growing in America, this volume contains several features which make it exceptionally valuable:

First, plain and carefully thought out rules, which have proven successful for many years in actual practice.

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atically tried for years in this country in testing beds.

Third, ninety-six remarkable illustrations in color reproduced from autochrome color photographs made from the varieties tested.

In addition, chapters devoted to general information are added as of interest, and books going further into detail on the various subjects are suggested.

If you love roses and grow them, or desire to, you will need the explicit and authoritative instructions covering every phase of the subject in this work, the result of 15 years' close study of rose growing for the home garden. You will get big value in this beautiful large octavo volume, bound in handsome cloth, gold stamped, in a slip case.

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The finest lot we have ever grown. Heavy on Elberta, Carman, Belle of Ga., Crawford's, Salway, and all the leading kinds.

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By the carload 1 and 2 yr., all sizes.

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Barrs, Conovers, Giant, Palmetto.

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1000 Bushels Promiscuous.

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This is The British Trade Paper being read weekly by all Horticultural traders. It is also taken by over 1000 of the best Continental houses. Annual subscriptions to cover cost of postage, \$1.00. Money orders payable at Lowdham, Notts. As the H. A. is a purely trade medium applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trades. Address

Editors of the "H. A." LOWDHAM, NOTTS, ENGLAND

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Crop 1915 can ship at once. These are the same kind that the best Nurserymen of the United States and Canada have been planting for years with such splendid results. All who plant these splendid seed early under favorable conditions will get the same splendid results next season.

It is the perfect stand of seedlings that make the profitable blocks. These are the best lot of seed we have ever offered. They will run (7000 to 8000) seven to eight thousand seed per bushel of 50 pounds. Price only \$1.25 while they last. Have no prospect for 1916 seed. What few we get will not be in before October 1st.

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Greensboro, N. C.

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ROSES, Field-grown, own roots and budded.
ABELIA GRANDIFLORA. Transplanted, field-grown.
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ENGLISH WALNUTS.
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SPIRAEA THUNBERGII. A beautiful lot of stocky
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A fine stock of Hackberries, Koelreuteria, Tulip Pop-
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Send us a list of your wants and let us give you
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P. J. BERCKMANS CO., Incorporated
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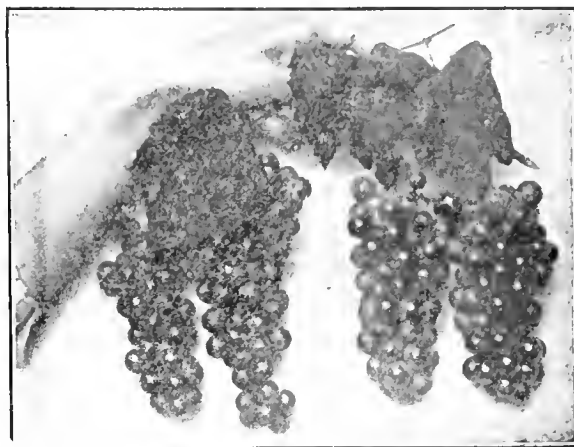
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A fine stock of leading varieties. One and two years.

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The largest and best stock of root-cutting plants in this
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Our blackberry plants are as well furnished with fibrous roots
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Since advertising in the National
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Palms and General Decorative Plants, Conifers, Shade and Ornamental Trees

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Large assortment of above.

A Large Stock of Apple, Pear, Cherry and Peach Grape Vines, Blackberry and Raspberry Plants

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Fruit Trees, Roses, Manetti Stocks

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1200 Acres "At it 25 Years"

Strawberries	Currants	Rhubarb
Raspberries	Gooseberries	Asparagus
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100,000 transplanted Raspberry, Blackberry and Dewberry plants for retail trade. See wholesale list before placing your order.

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Standard, Climbing, Weeping and Dwarf Roses in great variety Rhododendrons, the cream of the Hardy American varieties.

Andromeda floribunda, japonica, and speciosa, bushy budded plants.

Kalmia latifolia.

Green and River's Purple Beech in all sizes up to 12 feet.

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A very complete Line of Fruit and Ornamental Trees,
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A book of 120 pages, 5x8, of which 16 illustrate leading Roses in natural colors. All the necessary instructions which will be of value to the amateur are presented in clear, simple and concise form. Where, when and how to plant. Fertilizers, Insecticides, Planting, Pruning, Mulching, Winter Protection, with important lists of the best Roses for every imaginable place and purpose. Contains Calendar of Operations, in itself quite valuable. Regular price \$1.00 postpaid. For quantity, prices (2 or more) mention National Nurseryman and address the author.

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Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.

The Bay State Nurseries

North Abington
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This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us est.

When writing to Advertisers please mention the National Nurseryman.

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420 ACRES

WE GROW

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300 varieties of Conifers, 1 to 4 years old.
1200 varieties of Ornamental Trees and Shrubs, 1 to 3 years old.
1600 varieties of New and Old Ornamental Trees & Shrubs in all Sizes
250 varieties of Climbing Plants.
400 varieties of Conifers, 1 to 4 feet high.
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Manufacturers of

STEEL BOX STRAPPING

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½-inch, ¾-inch, 1-inch and wider, cut to any length
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Have, sometimes, bargain lots of steel strapping, 1-
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YOUR WAR TROUBLE IS OVER

Rhododendrons
best hardy var.

Azalea mollis
& Hardy Ghent

Roses, large variety

Hardy Climbers

Evergreen Shrubs

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Magnolias

Shrubs, Perennials, etc.

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Our MR. KONING is in the
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A splendid system of shipping
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THE TWO LEADING HEDGE PLANTS

Barberry Thunbergii



Thunberg's Barberry for a low hedge that will not winter kill, stands at the head of the list.

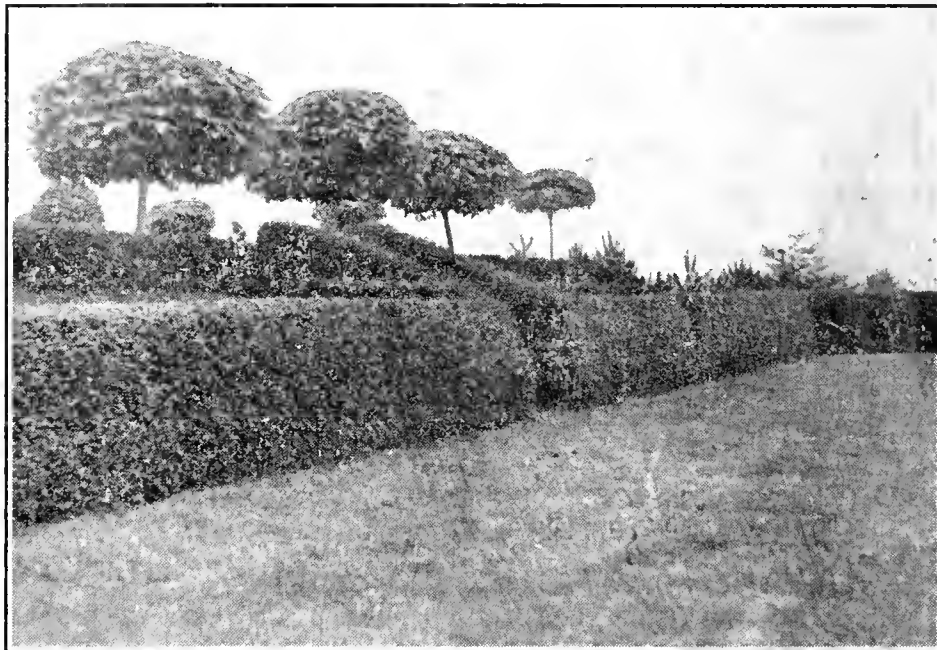
The leaves are small, light green and toward fall turn to various colors which produce a very pleasing aspect. In fall, this handsome plant bears a profusion of bright red berries which remain through the winter, making Thunberg's Barberry equally beautiful in summer and winter. This Barberry is without doubt one of the best hedge plants and one that requires no attention as it can be pruned or not at the owner's discretion. Barberry has many points of advantage not possessed by other hedge plants.

20,000	6 to 12 inch.
20,000	12 to 18 inch.
10,000	18 to 24 inch.
5,000	2 to 3 ft.
1,000	2½ to 3 ft.

Our Barberry is thrifty, well branched with an abundance of fibrous roots. None better.

Also apple, peach, pear trees and a full line of Shade Trees, Evergreens, etc. **Ask for our Complete List. Buy Now.**

California Privet



California Privet is undoubtedly the leading hedge plant for the middle and southern states. Under ordinary conditions it is hardy, nearly evergreen, with dense attractive looking foliage. After being planted for a time, a hedge of California Privet is almost impenetrable.

25,000	6 to 12 in.
25,000	12 to 18 in.
25,000	18 to 24 in.
25,000	2 to 3 ft.
5,000	3 to 4 ft.

Specimen California Privet: Strong, symmetrical plants, well branched and well leaved to the ground.

1,000 3 ft. tall, 2 ft. broad.

Standard California Privet: These plants have symmetrical crowns and resemble the expensive bay tree.

200 4 to 6 ft. stems, 2 ft. spread.

Our Privet is well rooted, has splendid tops and is evenly graded.

HARRISONS' NURSERIES, Berlin, Md.



THE NATIONAL NURSERYMAN



FEBRUARY 1917

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

*Peach, Gooseberries,
Currants, Berberis,
Spirea Van Houtte,
Other Ornamental Shrubs,
H. P. Roses, Etc.*

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.
MONROE, MICH.

MOUNT ARBOR NURSERIES

E. S. WELSH, Pres.

Shenandoah, Iowa



OUR SPECIALTY

A complete line of high quality nursery stock for wholesale trade.

APPLE SEEDLINGS

We are now assured of a choice lot of strong, healthy seedlings, which were grown on new land in the seedling district.

The supply of heavy seedlings is very limited. We have about 200,000 strong 1/4 inch and an equal number of 3-16 inch and up, also a good supply of No. 2 and No. 3. Will make special grades if desired.

GRAFTS

Apple and Pear Grafts made to order. A good list of varieties.

Consult us about your wants before buying.

Nursery Trade

depends largely
on Confidence.

BUSINESS SECRETS REVEALED



FELIX & DYKHUIS

WHOLESALE NURSERIES

Boskoop, - - Holland

Ask for Our Beautifully Illustrated Catalogue

February Bulletin

WATCH for it, a money saver on all lines of stock. More especially, Peaches, Ornamental Shrubs, Hedging, Planting Stock, etc. Don't fail to read it carefully, for it contains the best stock that can be produced, and remember, for this spring's planting, we carry Top Notch Berberry Thunbergii Seedlings.

C. R. BURR & CO.,
MANCHESTER, CONN.

HOLLAND NURSERY STOCK

FALL OR SPRING SHIPMENT

From Schaum & Van Tol, Boskoop, Holland

Boxwood bushes, pyramids etc.; Roses, Rhododendrons, Evergreens, Hydrangea P. G., Azaleas, Koster Blue Spruce

PRICES READY NOW—WRITE FOR THEM.

French Fruit and Ornamental Stocks

from Vincent Lebretons Nurseries, Angers, France. Catalog ready now.

Norway and Schwedler Maples, Lindens, Oaks, Planes, Elms, Thorns and all deciduous trees from Union Nurseries, Oudenbosch, Holland.

Gooseberries and Manetti stocks from England.

Hardy Lilies (Auratum, Rubrum, Album, etc.), from Japan.



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Raffia, Red Star brand and three other grades always on hand.

Write for prices

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FOR THE SPRING OF 1917

 We offer our usual line of 
Apple, Plum, Cherry, Peach, Shade
and Ornamentals.

WE CAN FURNISH IN LARGE QUANTITIES AND CAR LOTS

2 year Montmorency & Early Richmond Cherry
American Elm, 1¼ to 4 inch in caliper

Norway Maple, 8-10 ft. and 10-12 ft.

Soft Maple, 6-8 ft., 8-10 ft., 2½-3 in. caliper,
3-3½, 3½-4.

Catalpa Bungei, 1 and 2 year heads

C. M. Hobbs & Sons

Marion County

Bridgeport, - - Indiana

EVER BEARING STRAWBERRY PLANTS OUR SPECIALTY

We grow more strawberry plants for The Trade, than any other nursery in the World, over 100 of the leading standard varieties.

We ship direct to your customers under your tags or any way you instruct us. Plants that are strong and vigorous, and absolutely true to name. About 100 acres of our crop this season was grown on land that was never set to plants before and such masses of roots you never saw. Such stock will not only please you but will make you customers that will come back with their "repeat" orders.

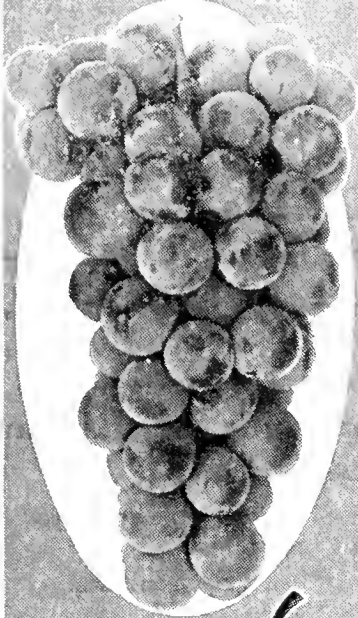
We can fill your orders any time from now until May 1st, with hardy grown plants that will live and do well anywhere strawberries are grown. We have upwards of 4,000,000 **Progressive**, and **Superb**, the best of the ever-bearers. At prices that will suit you if you are in the market. We also have Dewberry plants that are strictly A No. 1. We are short on Raspberries, and Blackberries, and shall be pleased to exchange—or buy good stock.

Ask for price list if interested.

E. W. Townsend
100 Vine St., - SALISBURY MD.



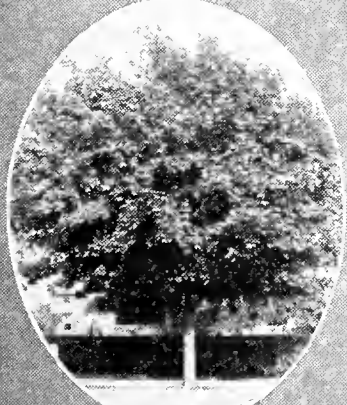
Delicious Apple



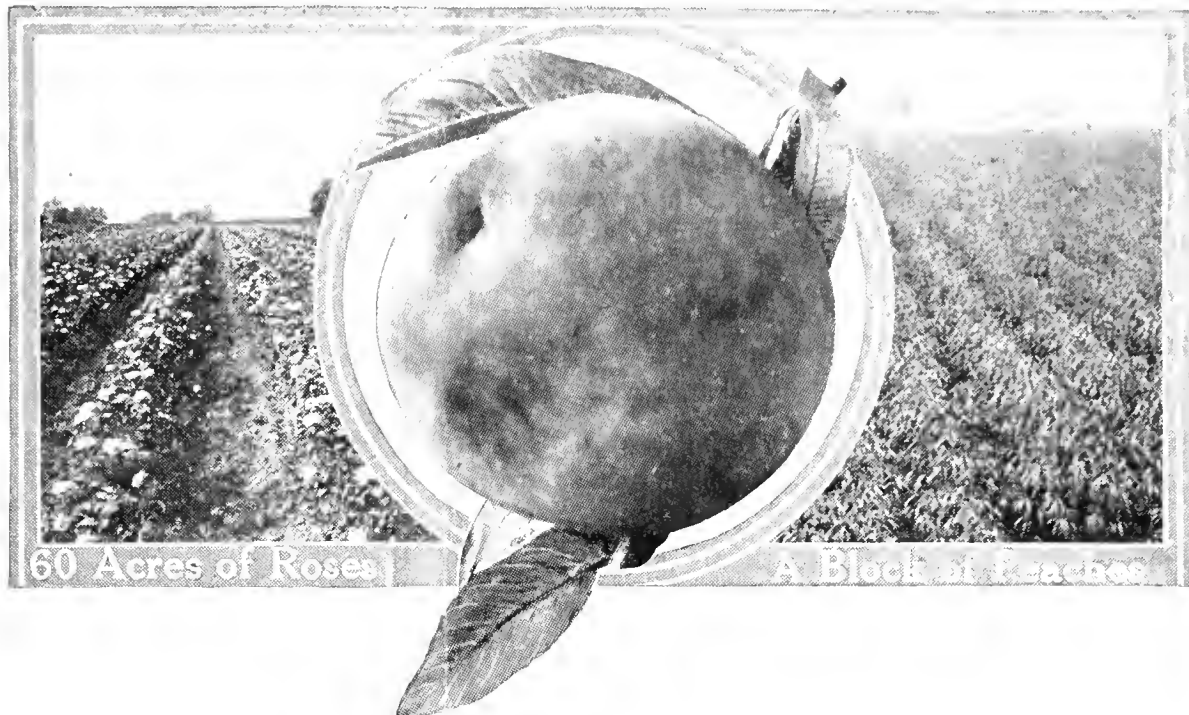
Campbell's Early Grapes



Bartlett Pear



Norway Maple



60 Acres of Roses

A Block of Peaches

According to popular tradition, there is little sentiment in business. We mean business all right,—BIG BUSINESS, and lots of it,—but yield to the February spirit, and send you this

VALENTYNE



The pictures illustrate a few interesting and important products of our 1200 acres. Of Shrubs, Evergreens, the great blocks and assortment of Deciduous Trees, the many acres of Hardy Perennials, and the output of 45 Greenhouses, there is no illustration; but WE HAVE THE GOODS. Altogether they establish our claim to being THE LARGEST DEPARTMENTAL NURSERY IN AMERICA

Jackson & Perkins Company

Growers of the "Preferred Stock,"—the "Made in America" kind, which is right here *where* you want it, *when* you want it and *as* you want it.

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For 1916-1917 we have the largest stocks that we have ever grown, including good supplies of the usual "J. & P." specialties.

In Ornamentals:

ROSES, field-grown
CLEMATIS

TREE-FORM HYDRANGEAS
TREE-FORM LILACS

(Largest stocks in America)
AMPELOPSIS VEITCHII

DUTCHMANS PIPE
(Not hyphenated. Born
and raised here)

SHRUBS
(Extra fine stock)

PERENNIAL PLANTS
(Large assortment)

SHADE TREES

In Fruits:

APPLES

PEARS

PLUMS

PEACHES

QUINCES


(None finer grown)

CURRENTS

GOOSEBERRIES

Jackson & Perkins Company

Newark, - - New York

 We sell to the trade only. We do not compete with our own customers by selling to planters.

Heikes—Huntsville—Trees



To Meet Your Needs in
Peach, Apple, Cherry, Pear, Plum, Compass-Cherry-Plum, Apricot, Pecan Seedlings, Privets, Roses (budded and own-root), Abelia Grandiflora, Berberis Thun., Spirea V. H. and Reevesiana, Lonicera Fragrantissima and Halleana, Kudzu Vines, and Sundry Ornamentals.

In good assortment of standard varieties. All our own growing.

Send us your orders and inquiries.

ROSES, Budded H. P's. One of our Specialties.

We grow them by the hundred thousands.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

We have the Largest Stock
of

Forest Seedlings
and **Shrubs**



TO BE FOUND IN UNITED STATES

We offer 500,000 Berberry Thunbergii, 1 and 2 year, 6 to 30 inch, Althea Rosea, Calycanthus, Spiraeas, Deutzias, Forsythias, Dogwoods, Honeysuckles, Philadelphus, Privets, and large variety Shrubs, Forest Seedlings, Red Bud, Magnolias, Elms, Box Elder, Beech, and a great variety of Seedlings. Lining out Stock.

We are headquarters for

Hard Wood Cuttings

Send for Trade List

RIVERVIEW NURSERY CO.
McMinnville, - Tenn.



R. F. D. No. 2



SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of
Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX
and
HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY
GENEVA, N. Y.

70 Years

1000 Acres



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE



THE

North-Eastern Forestry Co.

CESHIRE

...Connecticut...

Princeton Nurseries

Princeton - New Jersey

**ORNAMENTALS and
at WHOLESALE ONLY**

We do not sell to Department Stores

The patronage of The Trade is solicited

February 1, 1917.

J. H. Skinner & Co.

Topeka, - Kansas



Apple Seedlings

Japan and French

Pear Seedlings

Forest Tree Seedlings

FRUITS TREES

SMALL FRUITS

Rhubarb, Myatt's Linnaeus, divided roots, pure stock; Shade Trees, including a fine lot of Soft Maple and White Elm.

CATALPA BUNGEI

6½ foot stems, straight and smooth

Bechtel's Double Flowering Crab

Ornamental Shrubs

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

**Rawhide Brand of Shipping
Tags and Tree Labels**

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

ORNAMENTAL

TREES, SHRUBS, VINES, EVERGREENS
HARDY HERBACEOUS PLANTS

225 Acres

Entirely devoted to the growing of the
best quality of ornamental nursery stock.

WHOLESALE ONLY

We also grow the "unusual" things, you
cannot find elsewhere.

Small Trees and Shrubs for
Planting in Nursery Rows.

We shall have our usual supply for Spring
delivery. Catalogue ready January first.

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Supply of our usual brands on hand at
all times.

Thomas B. Meehan Co.,
WHOLESALE NURSEYMEN
Dresher, - Penna.

We can save you money on *CUTHBERT*

The Most Profitable

RED RASPBERRY

Extra strong well rooted plants,
grown for plants only, on our rich
new ground.

Write for Special Prices NOW

O. A. D. Baldwin

BRIDGMAN, - MICHIGAN

JOHN WATSON & CO.

Newark, New York

AGENTS FOR
F. DELAUNAY,
Angers, France

New Catalogue for Season 1916-1917 is now ready for
distribution and will be sent on request. Nurserymen
who like good stocks, evenly graded, properly packed, at
closest prices and lowest importing expenses, should write
us. We will gladly refer to last season's customers.
One wrote: "Delaunay's stocks check up more good points
in quality, grades and packing, than any others received."
This referred to a two-car-load order. Another wrote:
"Your importing expenses were the lowest." And this re-
ferred to a five-carload order. The combination of Quality,
Price and Service that makes Value, is appreciated by
buyers. If you want something better, for less, try us.
We have shown others; we can show you.

August first, 1916.

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa.

The Best Tree Digger on Earth



Used and Recommended by Leading
Nurserymen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

Stark Bros. Nursery & Orchards Co.
LOUISIANA, MO.

THE BEST IN NURSERY PRODUCTS

We carry a full line of fruit and ornamental trees, evergreens, shrubs, etc. Send us your list of wants.

Listed below are some real winners. If what you need is not here, write for our trade list.

15,000 Oriental Planes from 1 1/4 to 3-inch caliper. A large stock of Sugar Maples, American Elms, Carolina Poplars, Lombardy Poplars, Double Flowering Japan Cherries, Weeping Japan Cherries, Flowering Apples, Flowering Peaches, Magnolia Tripetela, Japan and American Judas, English Walnuts, Japan Walnuts, California Privet, fine, 2 to 3 ft. and 3 to 4 ft.

Apples and Peaches, 10,000 Downing Gooseberries, 2 years, No. 1.

**HOOPEs, BRO. & THOMAS
COMPANY**

Established 1853

West Chester, Pa.

Maple Avenue Nurseries

Philadelphia Office:

222-3-4-5 Stephen Girard Building

21 South Twelfth Street



BERRY'S Wholesale Nursery

Small fruit plants in variety; rhubarb; horseradish; California Privet; Barberry Thunbergii; Hydrangea P. G.; Spirea Van Houghti; Peonies—home grown and imported; Imported Boxwood, etc.

Stock in storage. Can ship any time.

See list before placing your order.

P. D. BERRY,

Dayton

Ohio

Franklin Davis Nurseries, Inc. BALTIMORE - MARYLAND

OFFER FOR SPRING 1917

APPLE 1-2-3 Year

Heavy stock of McIntosh, Wealthy, Baldwin and all leading varieties.

Grimes Golden topworked 1 and 2 yr. heads.

PEACH

The finest lot we have ever grown. Heavy on Elberta, Carman, Belle of Ga., Crawford, Salway, and all the leading kinds.

STD. PEAR

Kieffer 2 and 3 yr., all sizes at a low price. Garber, LeConte, &c.

SHADE TREES

Oriental Planes—the coming tree for city and suburban planting, all sizes. Special prices on transplanting sizes. Norway, Silver and Sugar Maples; Carolina and Lombardy Poplars; Red, Pin, and Willow Oaks, etc.

PRIVET CALIFORNIA

By the carload 1 and 2 yr., all sizes.

ASPARAGUS 2 Years

Barrs, Conovers, Giant, Palmetto.

PEACH SEEDS

1000 Bushels Promiscuous.

WRITE for prices and wholesale Trade List.
Samples upon request.

Place your orders early.

A RARE BARGAIN

Going Nursery For Sale

112 acres level fertile land planted to general line of fruits, shrubs and ornamentals; two dwellings; large new frost proof storage cellar; packing house; barn; horses, tools and equipment; office supplies and equipment; thousands of dollars of spring orders; large agency force and mail order business; everything complete and first-class; paying business from the start; nothing to buy in order to get started; location ideal for nursery; four railroads; four express companies; pleasant home surroundings; company incorporated under laws of Pennsylvania; possession at once; nothing reserved; internal dissensions in company cause for selling; liberal terms, not much cash required. Address

"P," care National Nurseryman, Hatboro, Pa.

Your Customers Know-

whether you fill their order with first-quality Dutch Bulbs, or send an inferior grade.
The first means compliments.
The second means complaints.

This year make your customer's list a "compliment list" by filling every order with Grootendorst's Bulbs, which for almost a quarter century have been pleasing critical American buyers.

Your order may be sent direct to our American branch, or held for our salesman who will call soon.

F. J. Grootendorst & Sons
Room 1101 10 BROADWAY
New York N. Y.

V.G.'S

VERY GOOD

HARDY NURSERY STOCK SUCH AS.
AZALEAS, BUXUS,
CONIFERS, EVERGREENS,
PAEONIES, MAGNOLIAS,
RHODODENDRONS, ROSES, ETC.

Offered by

VAN GELDEREN & CO.

Wholesale Nurseries

Ask for Catalogue

BOSKOOP (Holland)

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Spring 1917

GRAPE VINES—One and two years old. Varieties largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas. Free from weed seeds, all recleaned and guaranteed first class.

Correspondence solicited. Price list upon request.

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The Framingham Nurseries

200 Acres
High Grade
Trees, Shrubs,
Evergreens,
Vines, Roses,
Etc.



Fine Stock
of
Rhododendrons
Kalmias
and
Andromedas

Send for Price List

W. B. WHITTIER & CO.

FRAMINGHAM, MASS.

We have a splendid stock of

Grape Vines

and other small fruit plants for the Nursery trade, graded up to the highest standard and sure to please you.

Give us a trial order, send in your list now for quotations

WHEELOCK & CONGDON

SUCCESSORS TO
WILLETT & WHELOCK

North Collins, - N. Y.

Foster-Cooke Co.

Nurserymen

Fredonia, N. Y.

Growers of

Grape Vines, Gooseberries, Currants

One and two years old. Graded up to the highest standard. Our stock never looked better. Write us for catalog. Send us your list of wants. Our prices are right, our stock A No. 1.

We grow our Stock up to QUALITY and GRADE, not down to a price. Nevertheless, our prices are always in line, you can't afford to pay less, and there's no sense in paying more. If you are pleased with what you have been getting, you will be better pleased with our stock.

When writing to Advertisers please mention the National Nurseryman.

CALIFORNIA PRIVET

Over two million plants of superior quality

All sizes from one foot to four feet

Very low rates in carload lots

Also Amoor Privet and Berberis Thunbergii in quantity

J. T. LOVETT, Little Silver, New Jersey

Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

Leading Specialties for Spring 1917

Cherry, Two Year, extra fine, leading varieties
in car lots

Cherry, one year, 11-16 up and smaller grades
Our Blocks of Cherry are perhaps the largest
in the country

Std. & Dwf. Pear, Japan Plum, Compass Cherry

Peach, One Year, Car lots or less

Weeping Mulberry and Bungei Catalpa

Hardy Budded Pecans and English Walnuts

WE OFFER

Grape Vines, Currants and Gooseberries
in all varieties and grades

—also—

Grape and Currant Cuttings and Light
Grade of Vines for Lining Out
in Nursery Rows

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F. E. SCHIFFERLI, Fredonia, N. Y.

**We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS**

FOREST TREE SEEDLINGS we only have in limited
supply this season, and would advise placing your orders
early.

TREE SEEDS we can supply in limited quantities.
Send list of your requirements for lowest prices. Trade
list ready.

The Willadean Nurseries
Sparta, Ky.

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

We offer for Spring 1917

500,000 PEACH, 40 Varieties, 1 year buds

CALIFORNIA PRIVET, 1 year and 2 year

ASPARAGUS, 1 and 2 year

DOWNING GOOSEBERRY PLANTS, 2 year

BARBERRY THUNBERGI, 2 and 3 year transplanted

Can supply the above stock in car load lots or less, also,
have a large stock of Rhubarb, Cumberland Raspberry
Plants, Spireas, Deutzia Assorted, nice specimen plants.
Evergreens, Horse Chestnut, N. Maple, Lombardy Poplar
and Planes, etc.

PEACH TREES, CALIFORNIA PRIVET, ASPARAGUS,
RHUBARB, Etc., in storage, can ship any time.

We will make attractive low prices for early orders
Send List of Wants

For FUMIGATION With
HYDROCYANIC ACID GAS

“CYANEGB”

Sodium Cyanide in egg shape, each egg weighs as
near one ounce as possible. Destroys scale insects
on Fruit Trees, Nursery Stock, Plants under glass
and in Greenhouses.

Manufactured in U. S. A. by

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The kind that give satisfaction.

Facilities for the handling of your requisite,
combined with the quality of our product is un-
surpassed.

Samples and prices are at the command of a
communication from you.

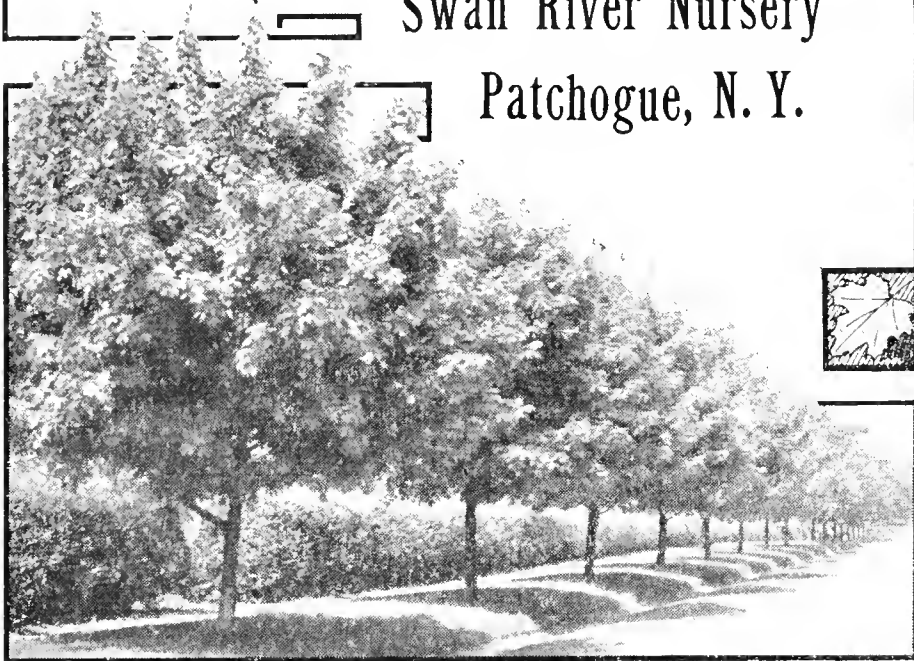
Dayton Fruit Tree Label Co.
South Canal St., Dayton, Ohio

Extra Large Norway Maples

Strong trees with sturdy trunks and heavy, fibrous roots. From tip to root they are extra good. Trunks straight as an arrow, 1 to 3½ inch caliper. Just right for planting on streets, drives, lawns, etc. Get our quantity prices for spring delivery.

Swan River Nursery

Patchogue, N. Y.



IT IS TIME

To place your order if you need stock from Holland this Spring.

WRITE TO-DAY for surplus list

to: **Wm. G. KONING,**

% P. C. Kuyper & Co., 12 Broadway, New York

He is in constant connection with us by mail and CABLE.

He will be in NEW YORK when your goods arrive.

Our splendid system of shipping prevents all delay.

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Boskoop, Holland



The greatest time-and labor-savers for seeding and cultivating

Planet Jr. implements are quick and easy to operate--they economize time and effort, enable you to get bigger and better crops because they do more thorough and accurate work, and they outlast several ordinary implements. Fully guaranteed.

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NO. 3 PLANET JR. HILL AND DRILL SEEDER is a popular seed-sower at a moderate price. Sows all garden seeds in hills and drills. A favorite with seedsmen, truckers, onion growers, and large gardeners. Sows accurately in a narrow line making wheel-hoe cultivation easy. We make 32 other styles of seed-drills and wheel-hoes--various prices.

NO. 8 PLANET JR. HORSE-HOE AND CULTIVATOR does a greater variety of work and does it more thoroughly than any other cultivator ever made. It has stronger, better construction. Its depth regulator and extra-long frame make it steady-running. Adaptable to deep or shallow cultivation and to different widths. 15 other styles of one-horse cultivators--various prices.

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Illustrates and describes over 70 tools for farm and garden including Seeders, Wheel-Hoes, Horse-Hoes, Harrows, Orchard, Beet-, and Pivot-Wheel Riding Cultivators. Write postal for it today!

S. L. ALLEN & CO.,
Box 1208 V, Philadelphia



The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXV.

HATBORO, PENNA., FEBRUARY, 1917

No. 2

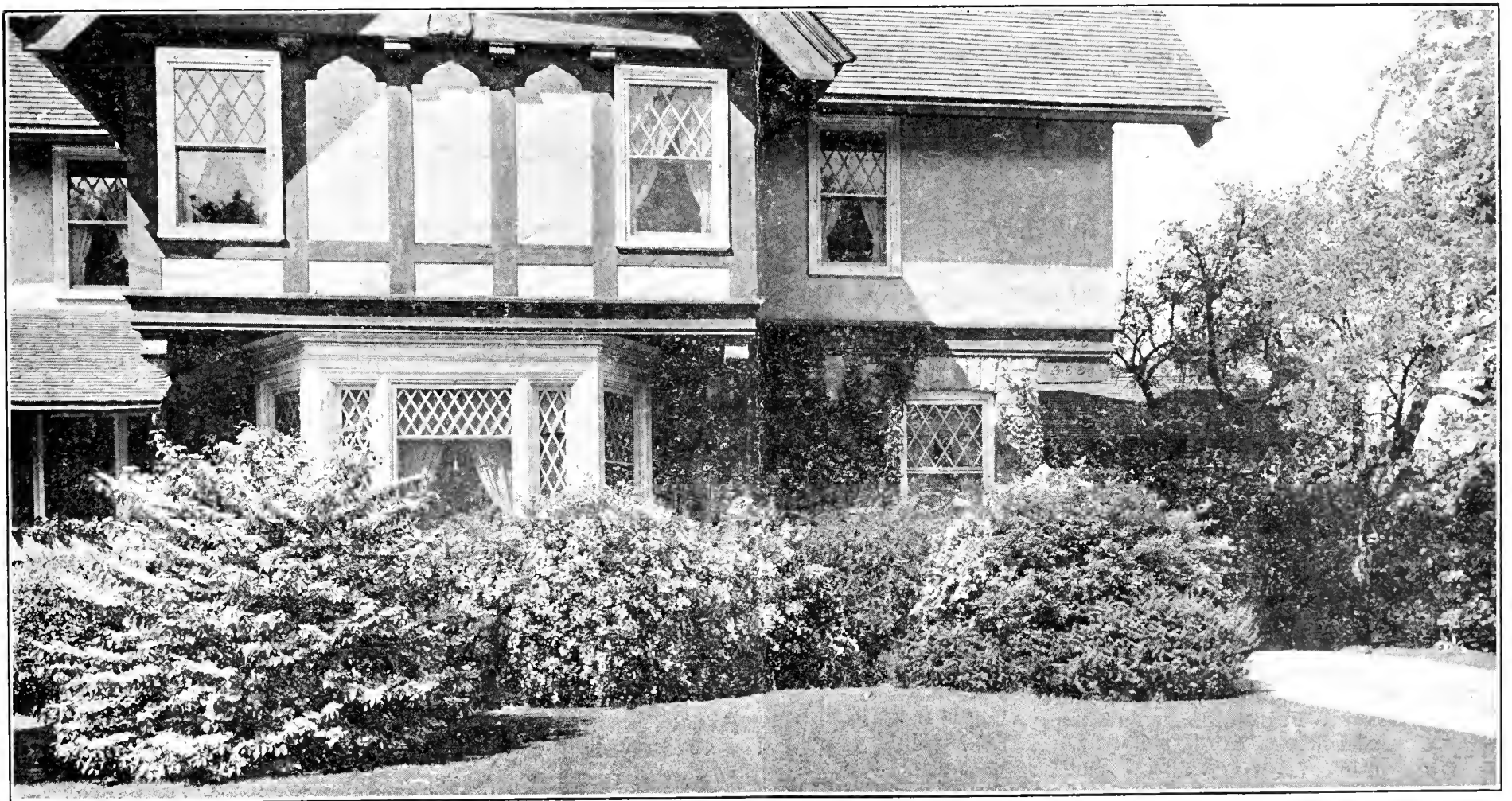
BASE PLANTING

IN our last issue we dealt with the use of evergreens for the base or foundation planting of houses. While this type of planting is undoubtedly the best when conditions permit, the use of shrubs give very effective results and are much less expensive.

The use of *Berberis Thunbergii* for this purpose has become very general, and not without reason. It is a plant that will thrive in dry, hot positions, such as are

Hydrangea paniculata grandiflora, *Deutzia gracilis* and *Deutzia Lemoinei*, and along the seashore there is no shrub equal to the *Hydrangea Hortensia Otaksa*, but this does not seem so dependable inland.

These are small or medium growing kinds. Among the larger ones which are usually adaptable are the Forsythias, Philadelphus, Tamarix, Weigela, *Berberis vulgaris*, *Hydrangea quercifolia*, *Spiraea prunifolia*, *Spiraea*



*Showing the effective use of flowering shrubs along the foundation of a house.
For analysis of the material used see text.*

often found at the base of buildings, and the plant is always attractive in habit and the added feature of the red berries hanging on the greater part of the winter make it an extremely valuable plant for this purpose.

Other good shrubs for sunny positions are *Spiraea Van Houttei*, *Spiraea Thunbergii*, *Spiraea Anthony Waterer*, *Ligustrum Regelianum*, *Kerria Japonica*, *Symphoricarpos racemosus*, *Philadelphus Lemoinei erectus*,

Reevesii, *Syringa Persica*, *Viburnum tomentosum*, *Viburnum Sieboldi*, etc.

Of course, it goes without saying that there are a host of other kinds that may be used satisfactorily, but the above will be found to be among the most adaptable to the conditions usually found.

The effective use of shrubs for foundation planting depends very much on the selection and placing. The

most pleasing feature in the illustration is the *Viburnum tomentosum*, seen to the left of the picture. It stands far enough away from the building to permit of full development of the plant, and bring out its beauty of habit. When such results are possible, it is difficult to understand the reason for the common practice of planting close and shearing to prevent flowering. If a bank of green foliage is wanted then by all means use a plant that lends itself to such treatment, such as the California Privet.

Perhaps the one criticism that may be offered of the planting as shown in the picture is that the kinds used in front of the bay window are too large growing. These could have been used to better effect in front of the ivy covered wall between the windows. At this

point even taller growing kinds, like the *Chionanthus Virginica*, *Cotoneaster Simonsii* or *Cornus florida rubra*, could have been used to good effect, and smaller ones in front of the windows, so as not to obstruct the view.

The group near the drive to the left of the picture, is good and largely composed of Regel's Privet and Japanese Barberry, which may be readily pruned and kept in order without destroying their beauty.

In the present instance a planting composed of various kinds of shrubs gives the prettiest effect, but very often the architecture of the house or the position to be treated calls for a planting of all one kind. It is a fairly safe statement to make that planters are apt to use too much variety when much more pleasing results would be obtained by more simplicity and dignity.

Report of the International Forestry Conference and 37th Annual Meeting of The American Forestry Association

*Telling How Strong the Sentiment is in Favor of Absolute Quarantine
Against all Nursery Stock From Abroad*

THE Thirty-seventh annual meeting of the American Forestry Association and the International Forestry Conference was held in Washington, D. C., January 18th and 19th.

While the program covered topics relative to Forestry in general, the subject of the White Pine Blister Rust was the feature of interest, and the greater portion of the papers and discussions was upon this subject.

The session held Friday afternoon was the one of most interest to nurserymen, inasmuch as it was at this session that the question of injury to forest trees due to importations by nurserymen of unclean nursery stock was discussed.

"Losses Caused by Imported Tree and Plant Pests"

C. L. Marlatt, Chairman Federal Horticultural Board.

"The Independence of American Nurseries"

David T. Fairchild, Agricultural Explorer in Charge
of Office of Foreign Seed and Plant Introduction.

"The Necessity for a Federal Quarantine Against Tree
and Plant Importations" J. G. Sanders.

Economic Zoologist of Pennsylvania.

Discussions.

Dr. Marlatt gave a brief history of some of the diseases and insects which had been brought into this country on imported stock, and presented an array of figures showing the enormous havoc resulting from their spread. Plants introduced from Manchuria, Africa and China particularly have caused untold harm, many of the diseases being unrecognized at the time the infected plants were imported. He felt that the Federal Horticultural Board should have the power to declare a quarantine where need exists.

Mr. David T. Fairchild was unable to be present at the

meeting, due to illness, but was represented by Mr. Dawson, from his office.

While speaking on the subject of "The Independence of American Nurseries" Mr. Dawson made many surprising statements which clearly showed his unfamiliarity with the subject in hand. "One reason why nurserymen import seedlings is because they are cheaper than those grown here" he stated,—also that "Apple, Pear, Quince, Cherry and Rose stocks are now being successfully grown in America." This will surely be interesting news to nurserymen. He further declared that the only way to stop the introduction of insects and diseases in this country was to stop the importation of all nursery stock.

"The Necessity for a Federal Quarantine against Tree and Plant Importations" was presented by Prof. J. G. Sanders. That some action be taken promptly was the idea advanced by him, but only a quarantine on larger and more matured nursery stock should be placed in the near future, this should be followed later by an absolute quarantine on all trees, shrubs, evergreens and plants, including all small stock, such as nurserymen use for planting.

He further declared that with advance knowledge of such absolute quarantine to be placed in the future, nurserymen could prepare themselves, by commencing the production of this small stock which they are now importing.

After some further discussions, the Committee on Resolutions presented their report,—The following resolution being adopted unanimously and was heartily applauded, there being no question but that the sentiments

expressed in the resolution met with the full approval of the meeting.

"In view of the spread of diseases and insect pests introduced from foreign countries, such as the chestnut blight, gypsy moth and white pine blister."

"Resolved, that the American Forestry Association favor the principle of absolute national quarantine on plants, trees and nursery stock to take effect at the earliest date which may be found commercially expedient."

Pamphlets bearing the titles of "A Bandit from Abroad" and "An Invasion from Abroad" were freely distributed among the members and visitors at the meeting.

NURSERYMEN ATTEND THE MEETING OF THE AMERICAN ASSOCIATION OF OFFICIAL HORTICULTURAL INSPECTORS

The 29th annual meeting of the American Association of Economic Entomologists was held at the Columbia University, New York, December 28th to 30th. Scientists from all over the country were there, attending the meetings of their various interests, reading their papers, making their addresses and comparing notes.

A conference on Phytopathological Inspection and Quarantines was held in joint session by the American Phytopathological Society, American Association of Economic Entomologists and the American Association of Official Horticultural Inspectors.

The Third session held on Friday evening was held at the American Museum of Natural History and was in the form of a round table discussion of Nursery Inspection and quarantines.

The Horticultural Inspectors very kindly handed the meeting over to the visiting nurserymen.

Mr. William Pitkin, Rochester, N. Y., chairman of the Legislative Committee, acted as Chairman and Mr. Curtis Nye Smith, Boston, Mass., Counsel of the American Association of Nurserymen, as Chief Speaker.

The meeting was a most enjoyable and profitable one as it gave those present an opportunity to get a grasp of the other fellow's view, and showed that every measure, however impractical, illegal or unjust had behind them a sincere desire to accomplish good, and such a meeting works wonders in bringing about mutual understanding.

As Mr. Pitkin stated, the aim for uniform State Legislation was growing slowly and surely, but it was hardly to be expected that 48 states, with their conflicting interests and ideas, could be brought in line all at once.

There is little doubt but that Prof. Sanders' Bill is the most practical solution yet advanced and will form the basis on which order will be brought out of chaos.

Curtis Nye Smith, Counsellor for the Nursery and Seed Trades, addressed the meeting and submitted to questions on legal phrases of the subjects under discussion.

It was very difficult for the lay mind, as represented by the entomologists and inspectors of the various states to grasp the principles of United States Law "that no individual state had the right to impose its rules on ex-state nurserymen."

Both nurserymen and inspectors are to be congratulated on the evident good feeling and mutual co-operation evidenced at the meeting.

NURSERYMEN SHOULD STUDY LANDSCAPE GARDENING

By E. D. Pannell

In landscape work we nurserymen are glaringly deficient. I believe the standard of the whole nursery trade will be elevated when every nurseryman has a proper landscape training. Most of us grope our way into the department by making an honest effort to fill a need we have observed to exist. The nurseryman who can make a practical working plan for the small property owner, by which he can plant his suburban lot, of not over fifty foot front, properly and artistically so that the finished work will be just right, is not only going to sell the stock he grows, but he is going to grow stock that is worthy of growing and his customers will enrich his life with their praise as well as their money. I know the common way is to get a customer into your place in some way—sell him all you can of something he perhaps cannot use to advantage, and leave him to stick in the stock in any old way he can devise, and then we expect that customer to come back after more and wonder why he never shows up again? When you build your house you start with the plans and drawings of the architect. You do not have to go to a boiler factory and buy your steam heating plant, guessing at the size and number of radiators, etc. You do not buy your plumbing and set your hired man to work installing it as he might be able to do in a stable. Why should we trust a customer to properly decorate his home grounds? One thousand persons will see his planting about the front, to every one who sees the inside of his house and his steam radiators. How can his property look like a *home* if it is not decorated and properly planted by the man who knows how? I have only a humble estimate of my own ability in this department, but I wish to tell you I have had many home owners tell me as follows:—"I have been waiting for months for some one to show me what you have by the little sketch you have so kindly submitted. I want you to tell me what it will all cost. I want to have it if I can afford it, etc." No nicely made catalogue can supply this need on the part of your customer. No college graduate who has taken some special horticultural course can do it without the nurseryman's experience to back him. The field is practically untouched. Thousands of nice new places are being disfigured annually because the "man who knows how" is asleep, so the work is left to the owner or to some bold youth whose business card is engraved with some high sounding horticultural title after his name, but who needs about twenty years nursery experience to mellow him.

Tree agents with a plate book will walk miles for a five dollar order which someone will sign to get rid of him. The customers are waiting all down the block for the "man who knows how," and when he starts out to see them he is surprised when night falls that he has been only a short distance. He saw more business on one square than he ever dreamed existed in a whole state. After he has pleased one customer, he won't need to present his card next door. They know him before he calls and are waiting to see him.

De Kalb Nurseries, Norristown, Pa.



*The old saw that "A Cobbler's children are always poorly shod" does not hold good in this case.
Nursery home of Adolf Muller, Proprietor of De Kalb Nurseries, Norristown, Pa.*

The De Kalb Nurseries might be described as both young and small as nurseries go. The word good may also be added with equal fairness and they are eminently successful. Mr. Adolf Muller, the proprietor, puts his whole soul into his business, and is proving what energy, enterprise combined with good business ideals will do in a comparatively short time.

Doing a general business, both retail and wholesale, Mr. Muller recognizes that to make headway he must cater to both, separately. For increasing and expanding his wholesale business he specializes on good things, Phlox, Japanese Iris and *Euonymus vegetus* being the strong features at this time. By advertising and pushing these, he has a better chance to get business among the trade than he would by pushing a general line.

The accompanying photograph will give some idea of his stock of Phlox.

The retail end of the business, however, is the one that gets most thought. Mr. Muller makes every effort to follow the example of the storekeeper in displaying his goods and considers money spent in making the nursery attractive to passersby or visiting customers is a good investment. He has happily combined his own home grounds as one of the features of his nursery. This with an attractive office with about half an acre of tastily planted ground around it he considers one of the best salesmen he could possibly have. Mr. Muller thinks that the average American nurseryman has degenerated too much into the dealer instead of the true plantsman and is a firm believer that nearly all of the plants imported can be produced right here in the United States, and that lots of money awaits the nurseryman who will master this undeveloped problem.

The American Association of Nurserymen

Giving some of the Reasons Why all Nurserymen Should Support the Organization by Becoming Members

As President Watson states:—"The American Association of Nurserymen can have neither the wish nor the ability to serve any selfish interests; it stands in the broadest way for the interests of the whole trade in the entire country; it represents no section, it speaks for no class; it represents all sections and all classes: retailers and wholesalers, catalogue and agency, growers and sellers, and in nearly every state."

Considering the valuable work done by the American Association of Nurserymen, it is incomprehensible how many nurserymen fail to appreciate the good that the Association is doing directly for their interest, and hesitate to become members simply because they do not care to spend a few dollars required to pay the annual dues, yet they will spend more in other ways, that will not bring them anywhere near the results which a membership in the Association will.

The Legislative Committee, of which William Pitkin is chairman, has worked untiringly to prevent or minimize unjust legislation, not only in Congress, but in the several States, and the results accomplished each year by this Committee alone, have been the means of saving the nurserymen of this country, many thousands of dollars.

The Transportation Committee, Charles M. Sizemore, chairman, has done wonders in regulating classifications, freight rates and similar problems. Every nurseryman, whether he be a member or not, has benefited through these efforts.

Other Committees, of equal importance, have done correspondingly good work, yet there are a number of nurserymen who fail to appreciate it, and are allowing the members of the association to carry the burden. The few dollars required to pay the membership dues from nurserymen who do not now belong to the association, would go a long way towards assisting in enlarging its usefulness.

The association has for nearly two years employed the services of an attorney, Curtis Nye Smith, Boston, Massachusetts, so that every member of the association may have the benefit of his legal advice without charge. We are advised by many members, that this free legal service alone has saved them many hundreds of dollars.

Last year, the association inaugurated a Collection Bureau, under the direction of Mr. Smith, who is also the secretary of the association. This collection bureau has proven invaluable and a complete success. Accounts are collected much more quickly and at less expense than through other collecting attorneys.

These are only a few of the many advantages to be gained by becoming a member of the American Association of Nurserymen, and not only that, but it is the duty of every conscientious nurseryman to support the association by paying the small amount of dues required.

Are you doing your part, or are you leaving other nurserymen pay for the benefits you are deriving from the work the association is doing?

LETTER FROM PRESIDENT JOHN WATSON

Newark, New York, December 28, 1916.

To the Editor:

The American Association of Nurserymen at the Milwaukee Convention adopted a resolution inviting all district and state associations of nurserymen each to name a member of an Advisory Board for the purpose of advice and counsel and cooperation with our Executive Committee in all matters where other nurserymen or other associations could be of assistance when assistance was desired or needed. This resolution was proposed by the Executive Committee; it was the first resolution offered, and it was adopted unanimously by the Convention, indicating the importance attached to it by the nurserymen at Milwaukee. Following the instructions contained in the resolution, I wrote to the President or the Secretary of every nursery association that I knew of. It has been very gratifying to note the cordiality with which the suggestion was received and the promptness with which the invitation was accepted, and I am now sending you a list of the members

of the Advisory Board so far as I have been notified of their appointment.

The idea of this Advisory Board was a very happy one. The American Association of Nurserymen can have neither the wish nor the ability to serve any selfish interests; it stands in the broadest way for the interests of the whole trade in the entire country; it represents no section, it speaks for no class; it represents all sections and all classes: retailers and wholesalers, catalogue and agency, growers and sellers, and in nearly every state. Now, with the Advisory Board, there has been created what is in fact a Congress of the nursery trade associations; a clearing-house is effected where local problems and peculiar conditions can be disposed of whenever other nurserymen or other organizations can be of service to that end. It is a bringing together so far of seventeen associations with nearly two thousand members and representing most of the capital invested in the nursery business. And where the Advisory Board speaks, it speaks for the whole trade. It will do more than that: It will bring a better acquaintance and therefore a better understanding; it will put the various associations and their mem-

bers into closer touch with each other; it will mean a deeper sympathy and a fuller understanding; it will bring a realization that the interests of all nurserymen are exactly the same, whether growers or sellers, wholesalers or retailers, catalogue or agency; and it will afford opportunity to counsel together to the end that differences may be eliminated; and with that closer acquaintance and friendly counsel, we shall gain what we have so greatly lacked and so much needed, the cooperation without which we have been able to do so little, but which we can expect to accomplish so much. We have the same interests and the same ends, and we can best serve them only by traveling the same road and in company. This Advisory Board moves us a long step in the right direction.

Yours truly,

JOHN WATSON, *President,*
American Association of Nurserymen.

ADVISORY BOARD:

- American Nurserymen's Protective Association,
Represented by: Irving Rouse, Rochester, New York.
- American Retail Nurserymen's Protective Association.
H. L. Merkel, Des Moines, Iowa.
- Western Association of Nurserymen,
F. H. Stannard, Ottawa, Kansas.
- Southern Nurserymen's Association,
A. I. Smith, Knoxville, Tennessee.
- Pacific Coast Association of Nurserymen,
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- New England Nurserymen's Association,
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- California Association of Nurserymen,
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- Connecticut Association of Nurserymen,
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- Massachusetts Nurserymen's Association,
G. Howard Frost, W. Newton, Mass.
- Mississippi Nurserymen's Association,
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- Ohio Nurserymen's Association,
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- Tennessee Nurserymen's Association,
E. W. Chattin, Winchester, Tennessee.
- Texas Nurserymen's Association,
George J. Bowyer, San Benito, Texas.
- Oklahoma Nurserymen's Association,
Jim. Parker, Tecumseh, Oklahoma.

NEEDLESS PANIC

By F. W. Kelsey

The white pine blister rust agitation is apparently now in its acute stage. While the injury to the pine tree plantations and pine forest areas from the "rust" has been and is likely in the future to be of material importance; yet, as in all such matters the remedy in creating a condition of panic may occasion far more serious loss and prove more costly than the disease.

When we magnify by microscopic research any of the fungus or other injurious insect diseases, the possibilities for destruction become enlarged in geometric proportion until we become thoroughly alarmed, and the laboratory point of view soon becomes the basis of the most direful prediction for sensational public appeals, to say nothing of the radical congressional legislation now proposed.

Of the hundreds of injurious insect diseases that have menaced as many kinds of tree and plant life, how many of them have not at one time or another been singled out for the almost complete destruction of the object of the attack?

From the predicted loss of the grape vine and its destruction by the Phylloxera to the possible elimination of the pine trees by the blister rust, these scarce cycles come around as regularly as the seasons. Many can remember that the appearance of the weevil was later to prevent successful wheat growing; the boll weevil making impossible the continued successful growth of cotton; the potato bug it was thought would soon permit the growth of only sweet potatoes for general consumption; the elm tree beetle would ravage the elm trees to destruction; the Gypsy and Brown Tail Moths were to consume the growth of all kinds of live vegetation; the Aphis and fruit tree borers with the plum Curculio and San Jose scale were, in a short time, to eliminate successful fruit growing all over the country, and so on to the end.

In these, as in so many instances, that come to mind, human effort and nature's own remedial processes allow the great growth and production of tree and plant life in the aggregate to go on much the same, notwithstanding the local or even general losses such insect pests occasion.

With this view, as the Government and State authorities are fully awake to the importance of preventing the spread of the pine blister rust, it would seem as though there should be no stampede from fright for fear that the usual result will not obtain in the eradication or successful elimination of the blister rust disease.

The special committee of the American Forestry Association appointed five years ago to consider the relations between the forestry and nursery interests, and to harmonize, if possible, the existing antagonisms between the producers of forestry stock who were then, as now, desirous of shutting out all foreign supplies, and conversely those opposed to this plan for benefiting the comparatively few American growers;—the Committee's report after the subject had been gone over exhaustively was unanimously approved by the Society. This report, published in the Forestry Magazine and a number of the Trade periodicals, may now be of interest to those averse to extreme action on this matter at the present time.

The Chilean Strawberry, Peruvian or the Sand Strawberry (*Fragaria Chiloensis*)

By S. L. Watkins, Pleasant Valley, California

A NATIVE wild strawberry of rank vigorous growth, varying in foliage from a bluish silvery green, to deep green, and with a peculiar leathery texture, the leaves are large, glistening and shining and usually thick and firm with a thin silky down. The fruit stems are stout and rigid and usually above the foliage, blossoms are very large, an inch or more in diameter. The quality of the fruit is exquisite and the highest and most deliciously flavored of all strawberries.

This wild strawberry occupies the coast line from northern Patagonia to Alaska; in places hundreds of acres are covered with its shining dark green foliage, interspersed with its myriads of snow white blossoms; the fruit near the seashore is covered by shifting sands which becomes bleached in color. In these wild strawberry gardens many forms, strains and sub varieties exist, according to climate and environment. The many and varied flavors that this strawberry possesses is remark-

securing as many superior wild types as we can from Alaska to Patagonia.

Several years ago we obtained plants of the White Chilean strawberry; this is a strawberry of giant proportions, the foliage is a bluish green color and the leaf stalks are margined with silky hairs; the fruit stocks stand high above the leaves, the fruit is a wonderful waxy white, slightly shaded a golden yellow and with very prominent red seeds; occasionally a berry would show a slight flush of crimson on one side. The fruits are conical, rounding and as large as an ordinary hens egg. The flesh is very firm and sugary, quite rich and perfumed, but the flavor is totally unlike a strawberry, but nevertheless very delicious. The plants of the White Chilean are the very largest of all strawberry plants.

The Red Chilean strawberry is identical to the above, but the fruit is of a rose red color.

The La France, a strawberry largely grown in France



Arbor Vitae growing on the DeKalb Nurseries, Norristown, Pa., Adolf Muller, the proprietor on the right.

able, that is the flavor of the fruit in various locations.

Many of the wild types are high class strawberries without any hybridizing or selection by man. They are by nature a race of large fruited plants, and vary in color from pure white to yellow, pink and rose red. They will thrive and fruit well in very poor soil, also stand a great amount of drought, and will grow and thrive where the Marshall, Magoon, Brandywine and other choice American strawberries would die out. They respond readily to good care and attention. Many of the wild types are very prolific, and are absolute everbearers. Desiring to experiment with this race of strawberry plants, we are

is of *Fragaria Chiloensis* origin. The foliage of this plant is remarkable for its vivid green color and its healthfulness, being entirely free from rust or other diseases, and is an abundant plant maker; the fruit is a brilliant yellowish white, faintly touched on one side with light red. The flavor is rich, sugary and superb. It is a very productive sort.

The Patagonia is a type of this family of strawberries, and its introducer claims that the Patagonia is the first of a new race of strawberries which has come to make strawberry growers rejoice. It is accredited with great vigor, surpassing productiveness, as well as large size.

wondrous beauty, and exquisite flavor. The fruits are pale red in color.

Mr. Albert F. Etter has experimented quite largely with this race of plants and has produced a number of meritorious varieties. His great prize in this line he calls the Trebla strawberry. This berry is accredited with having seven distinct types of strawberries in its ancestry, but the basis of the type shows plainly the Peruvian Beach strawberry. The Trebla plant is a rampant vigorous grower and forms enormous stool plants from 15 to 25 inches across, according to age, and throws up great numbers of fruiting stems, and has been accredited with a known yield of 25,000 quarts per acre. It is a true evergreen plants as well as an everbearer. Mr. Etter describes the fruit as medium size and slightly rough, rather than smooth with depressed seeds. It is very solid, heavy, firm, and built all in one piece. It picks readily without the husk and the color is red to very red and glistening. The fruit is just moderately acid, and is a good dessert berry, with a refreshing flavor of its own. Finest and best canning strawberry in the world. No amount of boiling will break the Trebla strawberry up. The cooked strawberries being a rich red and having a flavor second to none which I have produced." "To my mind it marks a distinct type and a breaking away from the hereditary type—a moving out into a field where the laws of hereditary that govern plant life will have less sway over the offspring, and we will get new qualities in texture and flavor that were quite beyond us heretofore."

We will add with our limited experience of the Trebla strawberry for one season that it is one of our best everbearing sorts, and will excel Progressive, Superb and Americus strawberries in yield.

The Beaderarena is one of Mr. Etter's productions and is a pink berry of extraordinary size, berries sometimes flattened or fan shaped and sometimes nearly three inches across. Regarding flavor Mr. Etter says "it is of an unique sweet and delicious flavor all its own. This is a Point Arena beach hybrid crossed with the Beader Wood strawberry. It has a shiny, glossy dark green foliage."

Ettersburg No. 80, a very sweet high flavored berry of large size, bold, striking foliage of a deep glossy green, fruit cherry red in color. Reports from Texas and the Southern states indicates that it is the best flavored strawberry ever grown there, and also it surpasses any other variety for standing long continued droughts.

Rose Ettersburg, large fruits, yellow to rose red in color—most deliciously flavored! foliage like Ettersburg No. 80. This variety will also grow and thrive where other varieties would die out by heat and drought. Rose Ettersburg has yielded at the rate of eight tons per acre without irrigation. A highly perfumed variety.

Ettersburg No. 112. (Description by Mr. Etter.) The berry of this fruit has that deep glossy appearance from the beach parentage. Berries very large and borne in very large trusses. It has that peculiar high quality in flavor that is found only among the hybrids of Chilensis blood.

Ettersburg No. 76. (Description by Mr. Etter). This is a Mitchells Early-Rose Ettersburg seedling crossed with the Cape Mendocino beach strawberry. It is a unique sort that has a very large berry and a truss that is some-

times 18 inches high. The old sell about crossing the strawberry with the milkweed and thus getting strawberries and cream off of the same plant is here worsted by about two points. For in No. 76 we have a strawberry that is almost red, while the flesh of the ripe fruit is a creamy yellow and very sweet, as if sugared, and to cap the joke it has a distinct banana flavoring. The variety is quite productive and one of the curios in the strawberry family.

Ettersburg No. 94. (Description by Mr. Etter). In No. 94 we have one of the eccentricities in strawberry hybrids—a white alpine strawberry crossed with a hybrid Rose Ettersburg-California. With all the white blood in its parentage it is an intense brilliant scarlet that fairly glistens, while the seeds are a deep golden yellow, sometimes shading to crimson on the sunward side of the berry. I have always rated it as about the most beautiful berry I have among my hybrids. In flavor it is also eccentric. None of its parents were acid berries yet it is strongly acid.

However, it is a good market and table berry.

Ettersburg No. 121. (Description by Mr. Etter). No relation to anything in cultivation, and exceeds all other varieties in high quality and solidity. It is one that always tastes good regardless of how many other varieties one may have tasted. It is a hybrid of the wild Alpine crossed with the Cape Mendocino beach strawberry and is a good all around berry. It is vigorous and has fine glossy green foliage. The blossoms are produced in great profusion and appear later than those of most any other variety. The berries are almost globular and deep glossy red, and red to the center. As it grows here it is of good acidity and sweet as well and of a flavor that asks nothing of odds from any berry I ever tasted.

Regarding Mr. Etter's work in producing his marvelous new hybrid strawberries he says "The new blood that is blended in the Ettersburg strawberries is the Peruvian beach or sand strawberry and the Cape Mendocino beach strawberry, both of these are classed as *Fragaria Chilensis*, but they differ widely in type. A third species used in my work is *Fragaria Californica* (California Alpine or Wood Strawberry) another species used is the wild alpine strawberry of Europe. Along with the blended blood of these four heretofore unused species there has also been used the various types among common cultivated varieties. The results that I have obtained by this original work that has been going on for over thirty years have been the creating of strawberries of distinctly new and unique qualities, such as flavors and berries of solid or cling core type. This type of berry gives the canner a strawberry that will not break up in process of canning. Another feature added in some sorts is a calyx cup or hull that readily parts from the berry with little abrasion of tissue. New colors and late blooming and holding the fruit clear of the ground are other unique qualities developed; but perhaps the greatest and most valuable departure from the ordinary type is the great vigor and constitution of the plants. The most noticeable difference is the heavy leathery foliage, as different as that from the ordinary type of strawberry foliage as canvass differs from gingham. This type of foliage alone would make the plant drought resisting, but the root system of the plant is as remarkable as the

part above the ground. The results are that we have a type of berry that will thrive and produce abundantly under conditions of heat and drought, where all varieties of the ordinary type score a failure.

When Prof. Jos. Burt-Davy was a member of the faculty of the University of California he interested himself in the beach strawberries of Point Arena, California. Some of the seedlings he grew were distributed by the University of California. I was among those who received those plants. The Point Arena beach berry is different from the form indigenous to the Cape Mendocino vicinity. Only within the past two years have I used the Point Arena variety in my work. From results in a small way I feel that we have something different to expect from the Point Arena variety, than we could expect from the Cape Mendocino berry.

Thus does it come to pass that every step we make opens up new possibilities—many and varying types of these beach strawberries are found along the Pacific Coast from Alaska to Patagonia, also up the coast on the eastern shore of South America.

If these are going to give varying results, and no two varieties of ordinary sorts work out the same when crossed with these forms, it puzzles one to figure out how much available material exists.

I am assured that there are thousands of distinct strains or types of *Fragaria Chiloensis* which exist in their native homes. This berry is found from the sea shore in South America to a very high altitude inland—from 8000 to 10,000 feet above sea level in the lofty Cordilleran or Andes Range of mountains.

Striking peculiarities in the shape and color of the leaves, size and type of the blossoms, flavor of the fruits, and size and various colors of the fruit, and other unusual qualities give us a type of plant from which we may expect many new and valuable features.

The various South American types of this plant have characteristics manifestly their own, as also have the California, Oregon, Washington, Canadian and Alaska types. The far northern types are almost frost proof and very late bloomers.

In Bailey's Cyclopedia of American Horticulture he states; "*Fragaria Chiloensis* is the original of the ordinary cultivated strawberries of America."

With this statement we beg to differ as he is decidedly wrong.

In Pardee's Classification of the strawberry, a work published in 1854 we find that the American Searlet strawberry (*Fragaria Virginica*) was the main ground work for the early American varieties this together with the pine strawberry (*Fragaria Ananassa*), which was early imported from England furnished the material for all the earlier varieties of strawberries of American origin. These two types are really the groundwork for all of our eastern varieties of strawberries catalogued at the present day. To any person who has seen the *Fragaria Chiloensis* and its hybrids they can readily see that no *F. Chiloensis* blood exists in the leading American strawberries of the eastern states. The day is rapidly coming when these new hybrid plants of *F. Chiloensis*

blood will replace many of the American varieties which are now so prominent and valuable.

In Bailey's Cyclopedia of American Horticulture he describes *Fragaria Chiloensis*: Low, but stout in all its parts; leaves thick, more or less glossy above, bluish white below; peduncle short, soon lapping on the ground.—runners mostly appearing after the fruit is gone—berry large and firm, dark colored, more or less musky in flavor. Reinforced by a very large calyx or hull. Pacific Coast region of South America. A common wild strawberry on the Pacific Coast of North America is referred to this species, but it is a question whether it is identical to the South American form.

In Pardee's Manual of the Strawberry, published in 1854 he states concerning *Fragaria Chiloensis*:

This strawberry inhabits the bleak wind swept plains of Tierra del Fuego, and the American Cordilleran region and reaches as far north as Oregon and Hudson Bay. The plants are designated by large flowers, broad dark green leaves which are hairy and thick. The fruit stalks tall and erect, fruits white to pale rose red in color, and of a pineapple flavor.

There is no question but what varieties can be bred up of the *F. Chiloensis* strain which will be adapted to all sections of the country and to all purposes.

The Arizona Everbearing, known also as the Mexican Everbearing is of *F. Chiloensis* origin. I have grown greater crops from this strawberry than any other variety which I have ever tested. Having grown over 30,000 quarts per acre. This variety gives us three crops a year and is the largest strawberry we ever grew. It is a giant plant in foliage and fruit, and will give an enormous crop the first season set out. Leaves are a dark leathery green, fruit rounding to conical, cherry red in color and most deliciously flavored.

A San Diego strawberry grower writes: "I believe great possibilities are in store for us. The advent of the Arizona or Mexican strawberry has given a new impetus to strawberry-growers in this vicinity. This variety being a strong grower and heavy bearer of large high colored fruits seems especially adapted to our section."

A very valuable feature connected with this race of berries is that many of them, especially the hard solid meaty types can be dried after the manner of figs. We have had many of these dry on the vines and be as sweet as honey. These dried strawberries can be used in every way that the ripe fruit is put to. The drying of strawberries offers an unlimited field for strawberry profits, as these dried fruits can be shipped any day of the year and to any distance. These strawberries can be sun dried or evaporated, and being large in size they weigh heavily. The white and rose colored types produce the best dried fruit. No doubt by natural selection and hybridizing a select race of strawberries for drying purposes could be originated, although the present sorts are very choice for this purpose. The natural sugar contents that these dried berries contain is sufficient to cook them afterwards without any added sweetness.

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NURSERY INSPECTORS

To an interested listener attending the meetings of the Horticultural Inspectors recently held in New York, two facts stand out very prominently, that all inspection and quarantines for the prevention of the introduction and spreading of insect pests and plant diseases are experimental, inadequate and inefficient for the purpose for which they are intended. Second that the efforts to accomplish the desired effect as far as the entomologists and inspectors are concerned are sincere.

In the case of nursery inspection it was brought out that often the officials exceeded their authority in their efforts to accomplish the work they undertake. The inspectors were often inefficient through lack of training, lack of funds to carry on the work and in spite of all the information available the field of endeavor in which they were working is an uncharted one.

If the above be granted, and one could hardly listen to the discussions without granting it, it clearly points to the necessity of close cooperation between the inspectors and the nurserymen.

The nurserymen should not look on the inspector as an officer of the law so much as a physician to whom to apply for diagnosis and remedies. The attitude of mind that puts it up to the inspector to discover diseases or pests and makes a government certificate of inspection final is all wrong and not in the proper spirit.

The nurseryman worthy of the name is the only efficient inspector of his own stock and should be made to feel his responsibility, and if he cannot be made to do so, the sooner he is put out of business the better. The duty of both inspector and nurseryman to the country at large as well as to themselves is to cooperate.

Let the nurseryman do his own inspecting and consider it a prime duty, with a government inspector as a friend and adviser to check up the work.

If it were not for the gravity of the case inspectors and

quarantines to prevent the spread of diseases and pests would be a joke. It was brought out at the meetings that nursery inspection was done to comply with the law, rather than to accomplish its purpose for which the law was made. Thus we have one man inspecting all the cotton, burlaps, etc., coming into the port of New York looking for a little bug in a dormant state. Another one inspecting carloads of potatoes for powdery scab. Then we have the inspectors passing through the forests looking for the white pine blister rust, and although the inspectors may be bald, clean shaven and sprayed occasionally, there is no provision made for treating the winds, rabbits, birds, etc., to prevent them from carrying the disease.

QUARANTINE The whole subject of quarantines and inspection as now being agitated looks as if the entomologist had been looking too long through the microscope, with the result that it has put his view entirely out of focus. This is causing an insane panic resulting in foolish laws and drastic quarantines.

A quarantine prohibiting all imports of nursery stock from foreign countries is being agitated in the year of our Lord 1917. Is it possible the panic stricken entomologists and legislators have forgotten the animal and vegetable kingdoms of this world of ours were in existence unknown thousands of years before they came to take care of them and are likely to be after they are gone?

If quarantines were effective remedies to prevent the spread of insect pests or diseases they would be worth consideration, as it is they are only so in theory and do little but prevent proper enterprise and business.

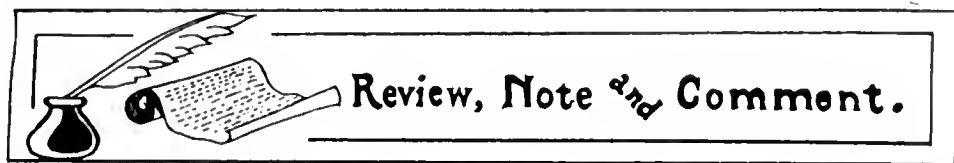
While admitting we do not want any more plagues in the nursery business than we already have, we can hardly imagine one that is likely to be more harmful to the nursery interests or the country at large than a quarantine against all nursery stock.

When the San Jose scale made its appearance, according to the entomologists, the fruit industry of the country was doomed, by the help of these same gentlemen we have better orchards than ever in spite of it.

Instead of panic stricken quarantines and legislation, what is needed is more level headed measures based on actual knowledge.

When a pest or disease is known then by all means take steps to combat it, but to put a quarantine into effect forbidding the entry of all nursery stock, even from countries where as strict measures are used to combat insect pests and diseases as in our own, for fear of the unknown is hardly the action of statesmen with a knowledge of real facts.

It is fairly common belief that it is possible to send a sample of soil to a good chemist, have it analyzed and be advised just what kind of fertilizer to use to produce a good crop. The summary of Bulletin No. 424 of the Geneva Experiment Station on Measurements of Soil Fertility states: "The general result of this investigation shows that we are not yet in a position through laboratory methods so far devised to measure the fertility of the soil."



Maloney Bros. & Wells Company, of Dansville, N. Y., have purchased the Fred Harder farm in the town of Sparta, consisting of 150 acres which is to be used for propagating trees.

This is on the upland at an elevation of 1500 feet and considered by nurserymen who are acquainted with it, as one of the best farms in this part of the country for growing trees. It joins the farm which we now own. This gives us about three hundred acres of the finest kind of upland.

The American Nursery Company, 149 Broadway, with its branches, the F. & F. Nurseries, Springfield, N. J., and the Bloodgood Nurseries, Flushing, N. Y., has adopted a policy of paying the same dividend on its wages account as on its capital stock, and announces that this will be its settled future policy.

V. L. Beyer, horticulturist and manager for the Mississippi Farms Co., for the past five years, and J. B. Campbell have established a nursery at Wiggins, Mississippi, and have set out five hundred thousand *Citrus trifoliata* on which they will bud Satsuma oranges. They will also carry a general line of high grade nursery stock.

Miss Dorothy Perkins, daughter of Mr. and Mrs. George C. Perkins, of Newark, New York, was married January 27th, to Mr. E. B. Estabrook, of Germantown, Pa. Miss Perkins' name has been made very familiar to the horticultural world by the popularity of the well known climbing rose, raised and introduced some years ago by Jackson & Perkins Co., and named in honor of Mr. Perkins' daughter.

PERTINENT REMARKS ABOUT PRICES

By D. R. Hanford

National Nurseryman, Hatboro, Pa.

Gentlemen:—

Your gentle reminder received. To get along without the National Nurseryman would be—well, maybe not impossible, but 'twould be so blame close to it that there'd be no fun in it. We enclose our check herewith.

We have been much interested in the articles regarding the practice by certain firms of quoting wholesale prices indiscriminately, and if there is anything that hasn't been said against such a custom, we'd like to say it. It is not only unjustified and inexcusable; it is unfair to all parties concerned, for it gives the customer a wrong impression of values and a strong prejudice against the fellows who are asking a fair, reasonable price for their stock; besides which, in the long run, it does the seller no good.

We would like to suggest that the firms guilty of this

practice be reported to your magazine as fast as discovered, and that their names be published under an appropriate heading. It seems to us that such a stunt might go far toward discouraging this evil.

And while we're talking prices, don't the prices some of the fellows are retailing at make you wonder if they have any idea at all of what it costs to do business? If we can't sell at a profit, what's the use of selling at all? If we can't break even on our costs, and realize a substantial profit besides, let's find out where the trouble is and correct it.

If it costs ten cents to produce a certain item, we aren't making 200 per cent. profit when we sell it at thirty cents. How much of our thirty cents do we spend in selling it? The selling expense, and the overhead expense, is just as much a part of the cost of that item as the first cost, and in a majority of cases, it will be found that the first cost is by far the smallest cost.

Suppose our sales expense amounts to thirty per cent of the selling price. That means that of the thirty cents we get for our tree, we spend nine cents in selling it.

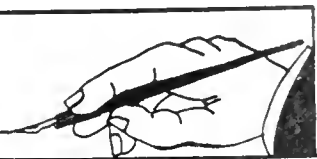


Field of Phlox on the De Kalb Nurseries, Norristown, Pa.

Suppose our total office and over head expenses amount to ten per cent of our total sales; we must then add ten per cent of our thirty cents, or another three cents. Now our tree has cost us ten cents plus nine cents plus three cents, or twenty-two cents, leaving us a net profit of eight cents—twenty-six per cent of our selling price; and the chances are that if some of us were to change these percentages to correspond with our books, we'd find our margin of profit so much less than this on some items that it would make us sit up and take notice.

Let's do a little figuring before we have occasion to regret it. The whole trend of everything at this time is upward. It is costing all of us a good deal more to do business today than it did a few years ago, and it is high time we realized that our stock is worth a fair price. We can get it, and we've got to get it, or suffer the consequences.

Answers to Correspondents



Would a storage cellar pay for a small retailer? Often in fall or early spring one gets in shipments of plants when the ground is frozen and I presume a cellar would be the thing in such a case. But for that alone it would hardly pay.

How much help is a storage cellar in holding back the stuff. Often people call for Spiraea, etc., about Decoration day or even later, when the shrubs are in foliage and have to transplant. Will a cold cellar hold them back any length of time?

When one has a cellar do you put the shrubs you expect to use in spring in the cellar in the fall?

What size cellar would be advisable for one that handles mostly ornamental stock, say about 5000 to 6000 shrubs, what would be about the cost, and how is such a cellar made?

Would it be practical and advisable as space is limited, to build a packing shed, also to be used for garage, above the cellar? Soil here is sand. M.

Answer—While no figures are available to prove that a storage cellar would be a profitable investment for a small retailer, the opinions and evidence of nurserymen are very much in its favor. The planting season is so very short that anything that will facilitate the handling of the stock, or of lengthening the season during which it may be handled is worth serious consideration.

It is safe to say that shrubs such as Spiraeas, Weigelas, Roses, Hydrangeas, etc., if dug when the wood is thoroughly ripe in the fall and properly put away in the storage cellar, can be kept dormant until Decoration day.

The plants should be dug in the fall after the first sharp frost causes the leaves to fall, properly graded, tied in bundles, and stored away when they will come out in the spring in fine shape.

Many of the large nurseries where fruit trees and shrubs are stored in large quantities, merely use excelsior or moss to cover the roots, depending on the temperature and atmospheric conditions to bring the stock through in good condition, but for a small storage house such as you have in mind it would be better to figure on the use of sand in which to bed the stored stock.

It would be feasible and practical to put up a building comprising a storage cellar, packing shed and garage but the arrangement and size would have to be worked out on the ground. Our advice would be to build your storage house as large as space or finances will permit, you will find profitable use for it. If the finances do not permit a very large one to start with, plan it so it may be enlarged when required.—*Editor*.

Perhaps some of our readers will kindly advise in relation to the above query.

National Nursery Publishing Company—"Do you know of any collection agency used by nurserymen, a firm known to be trustworthy and in every way safe to

entrust the collection of slow accounts to on a fair percentage basis? If you know of any such firm or can recommend to whom we might write for information we will very much appreciate having the information and thank you very kindly for it.

Answer:—The best collection agency and the one now mostly used by nurserymen is the Collection Bureau conducted by the American Association of Nurserymen, this is in charge of the Secretary of the Association, Mr. Curtis Nye Smith, 19 Congress street, Boston, Massachusetts.

Of course, to get the benefits of this collection bureau you must be a member of the American Association of Nurserymen, but we have no doubt but what you are a member of that Association, and if so you can write to Mr. Smith who will send you full information concerning this collection bureau.

Should it be possible that you are not a member of the American Association of Nurserymen, we would certainly advise you to make application to Mr. Smith for membership, then when you become a member you will have the advantage of not only this collection bureau, but also will be helping, through your membership fees, to support an organization which is doing a vast amount of work for the benefit of every nurseryman in the country, and will be helping to bear the expenses of the Association in conducting this work. Every nurseryman in the United States should be a member of this organization so that he may help along the good work the Association is doing and not allow a few men to pay the expenses of work which is benefiting all nurserymen in the country. S.

Obituary.

SWAIN NELSON

Swain Nelson, head of the firm of Swain Nelson & Sons Company, and the designer of Lincoln Park, Chicago, Ill., died on January 18, at the home of his son, Seymour G. Nelson, in Glenview, Ill., at the age of 89.

Mr. Nelson came to Chicago in 1855 and engaged in the landscape gardening profession, having previously prepared himself for it in Sweden, his native land. He founded the firm of Swain Nelson & Sons Company, one of the leading nursery and landscape gardening firms in the West, with offices at 944 Marquette Building, Chicago, and extensive nurseries at Glenview, Ill.

In 1865 Mr. Nelson submitted plans to the City Council of Chicago, for the laying out of Lincoln Park. These were accepted and during the following fifteen years he directed the work of developing that park as well as several others, including Humboldt, Garfield, Douglas and Union parks. He laid out Graceland cemetery and also the Waller estate now known as Buena park.

Mr. Nelson was an active member of the firm he founded until the time of his death. He is survived by two sons, Seymour G. and Alvin E. Nelson, and three daughters, Mrs. A. L. Gyllenhall and Miss Emelia and Miss Adah Nelson.

Philadelphia

"The Liberty Bell,"—who is not acquainted with this venerable relic of American History? On its pedestal in Independence Hall it rests, a reminder of the part Philadelphia played in American Liberty. As with many other old scarred veterans it must now call a silent but hearty welcome to our visitors.

The traveler in Philadelphia will find an abundant field for any interests he or she may cherish. Independence Hall and Betsy Ross's old home will prove intensely interesting to all. For scenic beauty, Fairmount Park, Willow Grove Park and numerous others will prove



worth visiting. Our Public Schools and Libraries will give the visiting student and teacher a fertile field to investigate.

At the conclusion of a well spent tour, a fitting climax is to mount to Old William Penn on City Hall and drink in the wonderful panorama from the four points of the compass. It will prove the concluding chapter of an interesting day.

From a commercial standpoint, it will be remembered that the City of Brotherly Love is the home of many of the largest industries of their kind in the world. Here are located the great Baldwin Locomotive Works, the Disston Saw Works, the John B. Stetson Company, and many more, each of which represents a line of endeavor carried to the highest and most successful standard.

THE DUPLICATE SHIPPING TAG

By Robert Sparks Walker, Read Before the Tennessee State Nurserymen's Association, Chattanooga, Tenn.

After all, things that appear to us as being small and insignificant, figure materially and sometimes enormously in the general results of our efforts. If we ever achieve anything worth while, it is because we give particular attention to the apparent trifling diminutive. Let a grain of sand get into the cogs of a watch, and it ceases to work; let the slightest thing go wrong with the motor of your car, or the ignition, or the gasoline feed, and you will soon have a dead automobile on your hands. The successful man today is he who watches the minute workings of his machinery. It pays and is the one rule that all nurserymen have adopted, who have had great success. But a careful scrutiny of the business machinery always reveals the secret that every little piece, though apparently in perfect working condition, is capable of being supplanted by an improvement over its kind.

I am not coming before you, gentlemen, today as a person who knows everything, but I wish to bring to you an idea and plan which cannot fail to appeal to you who make many shipments of plants and trees, particularly those sent by express.

Having been situated for many years in a city in which is located the headquarters of the largest express company in the South, I have had some experience which has given me an idea of the many shipments that go astray, and it is this that has prompted me to come to you today with this suggestion of a duplicate shipping tag. Many of you may already be aware that all stray shipments of express packages originating in the South are dispatched to the headquarters of the Southern Express Company in Chattanooga. This Company has one man whose duty is to use every means of ascertaining where these stray packages originated, and to whom consigned. In case of stray shipment of trees and plants, nearly a hundred per cent. of such shipments are due to the loss of the shipping tag bearing the name and address of not only the shipper but the consignee as well. To illustrate how diligently the Express Company strives to locate the names of the proper person to whom to deliver the packages, I want to give you a good example. Suppose that today the office in Chattanooga is in receipt of a package. The proper official opens it and finds the trees labeled, Frotcher, Van Deman, and Stuart. The average person knows nothing about varieties of trees and plants, so he immediately gets in touch with our office, from which he learns that these are pecan trees. Knowing from what direction the package came, he gets into correspondence with the pecan tree nurseries and are thus some times enabled to locate the name of the shipper. In the case of roses, fruit trees, or other trees and plants, the stray shipment causes the same amount of trouble. This

causes delay, which sometimes proves fatal to the trees and plants, because their perishable nature will not stand an unusual delay. In many instances the name of the nurseryman that makes the stray shipment is never located, consequently the Express Company ultimately is forced to pay for the loss, and the nurseryman who shipped the trees will have to withstand a shower of bitter epithets from an irate customer. It is obvious, therefore, that the consequences of these little accidents are very damaging to all parties concerned.

THE REMEDY

The remedy for this business evil, if I may be permitted to so term it is a simple one. It is known as the Duplicate Labeling System, of making shipments. If the nurseryman when packing trees or plants will make out two shipping tags, each bearing his own name and address, as well as that of the customer, and tie one tag on the inside of the package—any convenient place near where the trees are labeled—then if the outside tag is lost in transit, as often occurs, the express agent understands to open the top of the package and then he can relabel the package properly as before. As a consequence, there is no delay whatever in the delivery of the trees, the nurseryman escapes an onslaught of salty epithets, and the stray shipment clerk's office doors will soon be closed. I sincerely hope to soon have the pleasure of seeing that not only every nurseryman in the State of Tennessee adopts this Duplicate System, but it also become a universal practice by nurserymen everywhere.

"THE BOOSTER"



*It may be that you've no intention
Of going to the Philadelphia Convention,
But whatever you do, don't believe it is true
That business at home needs attention.*

ANNUAL MEETING OF THE PENNSYLVANIA NURSERYMEN'S ASSOCIATION

The annual meeting of the Pennsylvania Nurserymen's Association was held in the Commonwealth Hotel, Harrisburg, Pennsylvania, Wednesday, January 24th.

There was a full attendance at the meeting and several new members were elected.

Prof. J. G. Sanders Economic Zoologist, was present, and discussed at some length the various phases and conditions of the White Pine Blister Rust. He also gave a brief outline of the meeting of the American Forestry Association recently held in Washington at which meeting the proposition was made to quarantine all foreign nursery stock.

The following officers were elected:—

President—Bertrand H. Farr, Wyomissing; Vice President—Adolph Muller, Norristown; Secretary—Henry T. Moon, Morrisville; Treasurer—Thomas Rakestraw, Kennett Square. Executive Committee—Thomas B. Meehan, Dresher; James Krewson, Cheltenham; Charles L. Thomas, King of Prussia. Legislative Committee—William Warner Harper, Chestnut Hill, Philadelphia; Thomas B. Meehan, Dresher; George Achelis, West Chester; J. W. Root, Manheim; Edwin Thomas, King of Prussia; Adolph Muller, Norristown; Thomas Rakestraw, Kennett Square.

A. H. and N. M. Lake, nurserymen and landscape gardeners, Marshfield, Wis., according to a letter recently received, see a very profitable line in the many beautiful, practically unknown native trees and shrubs if they could only be brought to the attention of the public. There is no doubt about there being a big field of endeavor in this direction and every nursery worthy of the name, should test out and exploit worthy plants. It is never known until proved whether a plant is a gold mine or failure for different localities and purposes.

There is, however, one point to keep in mind, a plant must be very adaptable before it can become popular. Most shrubs and trees after once being planted receive very little skilled attention. To become very popular it must propagate and transplant easily and thrive in almost any position or soil without very much care and attention.

Consul A. B. Cooke, Patros, Western Greece, in Commerce Reports says the Mediterranean Fruit Fly has wrought great damage in the orchards of that locality. The remark that it is the first time in ten years or more that the presence of the fly has been noticed in the district would indicate that it is an intermittent pest.

December 20 1916.

National Nurseryman Publishing Co.,
Hatboro, Pa.

Gentlemen:—

We received such good results from our ad. in THE NATIONAL NURSERYMAN that we want to increase this to 1/4 page ad. for the coming year.

Very truly yours,
THE NORTH-EASTERN FORESTRY CO.

In the Missouri Botanical Garden Bulletin there is an account of the oldest living tree in the world. The tree in question is *Cupressus disticha*. It is growing in the Village of Santa Maria del Tule, in Southern Mexico, and is estimated to be from four to five thousand years of age and still in good condition. It is hard to realize that this particular tree started its growth at a period antedating any human records. The measurements made by the writer showed a circumference of 126 feet, breast high.

WANTED

PARTNER WANTED

The unusually rapid growth of my wholesale and retail Nursery business, located in North Alabama, requires additional investment to meet increased business. Splendid opportunity for a good reliable experienced nurseryman, with at least \$1000.00 or more in cash to go in business. On hand, 75,000 assorted shrubs of my own propagation ready for Spring planting, other plants, implements, live stock, and completely equipped propagating department.

Correspondence and investigation solicited from qualified parties only. Address:

PARTNER, Care The National Nurseryman.

WANTED—Competent nurseryman; must be thoroughly experienced with all branches of nursery work; have a thorough knowledge of successful propagating of ornamental nursery stock; must be able to furnish references. State age and all particulars in first letter. Address

ELMWOOD FLORAL & NURSERY CO.

P. O. Box 787 - - - Birmingham, Ala.

A MIDDLE WESTERN AGRICULTURAL COLLEGE

desires to secure the services of a working foreman to take charge of its nurseries and orchards beginning March 1st, 1917. Applicants must be experienced in all lines of nursery propagating and field work. A good opportunity for the right man. A new modern cottage ready for the successful applicant. Apply at once.

Care **HORTICULTURE**, This paper.

WANTED—A position as Superintendent with a reliable nursery company growing evergreens, ornamentals, and shrubs. If you need a man capable of producing the goods address

Superintendent, care of The National Nurseryman.

WANTED

3,000 1-3 year Western Hackberry Seedlings.
3,000 1-2 year Russian Olive Seedlings.

G. J. BRAUN, Capitol Nursery,

Denver - - - Colorado

LIGUSTRUM IBOTA REGELIANUM

WANTED—2,000 2 to 3 ft. Address quotations to

FRITZ EHRSAM, Architect,

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FOR SALE

OLD ESTABLISHED NURSERY FOR SALE

As I want to retire from business, I will sell besides the land, all nursery stock and implements. This nursery is located in the Northwest in one of the best business localities of this country. Address:

Z. W. S., Care "The National Nurseryman."

Tsuga Caroliniana from the high Carolina Mountains, the most beautiful Hemlock known.

Rhododendron Carolinianum, the new clear pink species.

Rare American Plants and Specimen Evergreens.

Rock, Water, and Wild Gardens designed and executed.

HARLAN P. KELSEY

Salem, - - - Massachusetts

Owner, Highlands Nursery in North Carolina.

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PEACH one year and June buds of all the leading varieties

Can make up Assorted Carloads

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Fine lot of Field-Grown Roses, Ornamentals, Evergreens, etc.

In fact we do a LARGE WHOLESALE BUSINESS, guaranteeing our stock to be first-class in every way.

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Specialists in Nursery Printing

Ask for Prices.

We are the printers of this Magazine

Surplus Pear Trees

Good Assortment Prices Very Low
FINE TREES

Concord Nurseries, Concord, Ga.

We are in the market for used trencher and firmer. Must be in first class condition. Pleased to receive wholesale and surplus lists, especially on light stock for lining out in the nursery row.

Keystone State Nurseries

BOYCE - - - Allegheny Co., Pa.

FOR SALE -- NURSERY TOOLS

1 Opener (plant and graft planter); iron frame and wheels all complete. Last a lifetime. Cost \$80.00.	Price \$40.00
1 Ilgenfritz firmer, late model. Good as new. Cost \$70.00.	Price 40.00
1 iron frame and wheels firmer complete. Price	20.00
1 heavy box clamp all iron but handle, one of the best made. Cost \$10.00.	Price 4.00
2 small box clamps or cant hooks, good as new. Price \$1.00 each	2.00
2 heavy steel strapped bar handle spades, never used. Price \$1.25 each	2.50
1 Stevens & Thomas tree baler. Cost \$7.00. In good order. Price	3.00

Address **E. H. GRAVES, Lee's Summit, Mo.**

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All standard varieties. We are located in the largest strawberry center in the world and have the soil and climate to produce the best of strawberry plants. California Privet, Apple trees, Asparagus roots, etc., in large numbers. Before placing order elsewhere, submit to us your want list, for prices. Stock guaranteed first class, true to name.

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The National Nurseryman, by special arrangement with the publishers, offers this work on easy terms. Six large quarto volumes. More than 3,600 pages. 24 full page exquisite color plates. 96 beautiful full page sepia halftones. More than 4,000 text engravings. 500 Collaborators. Approximately 4,000 genera, 15,000 species and 40,000 plant names.

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Volume V Now Ready

The National Nurseryman
Hatboro, - Penna.

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From Europe or Japan

ORNAMENTAL BULBS, PLANTS, and TREES

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Large assortment of Tree, Shrub and Fruit
Seeds for ornamental and forestry purposes
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I offer a bargain in 2 year No. 1 Perfection Fays, and White Grape, Currants. Also, I can supply Shrubby, Fruit and Ornamental Trees, and a fine stock of Hibiscus, (Red), Marvals, and Buddelyea (Butterfly Bush). My prices are reasonable for guaranteed 100% transplantable plants. Send your want list for prices by return mail.

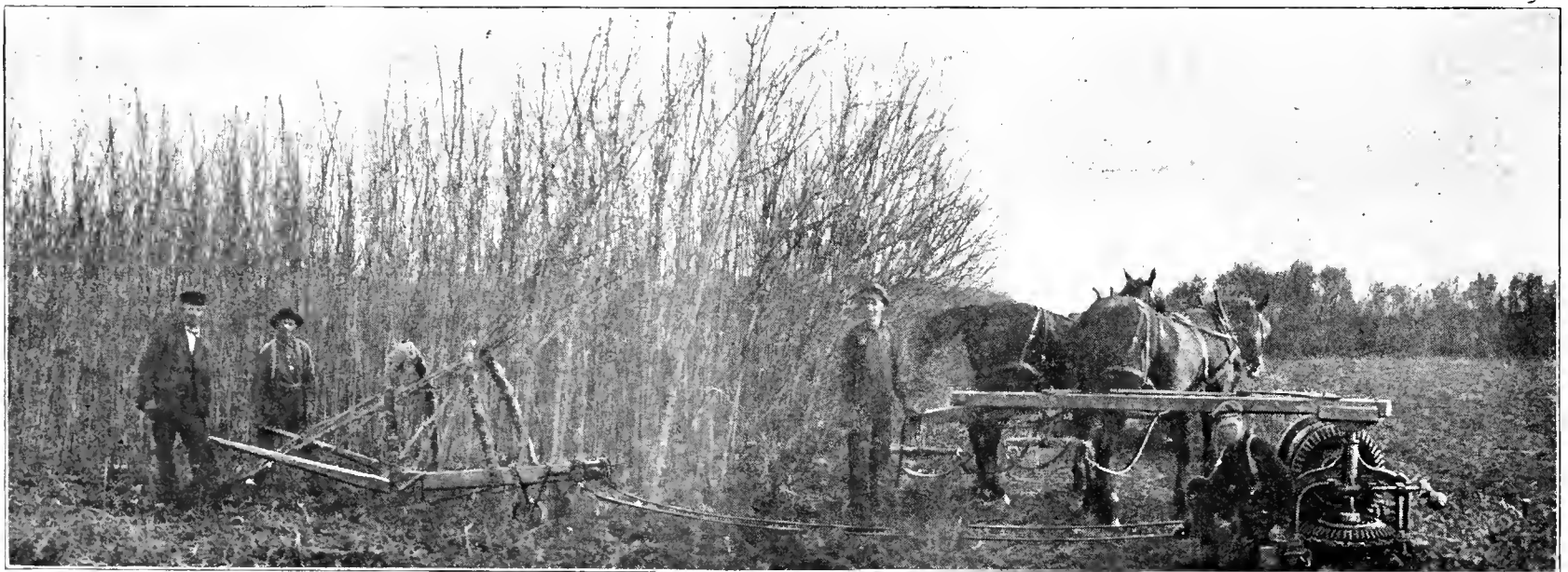
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Introducer of the

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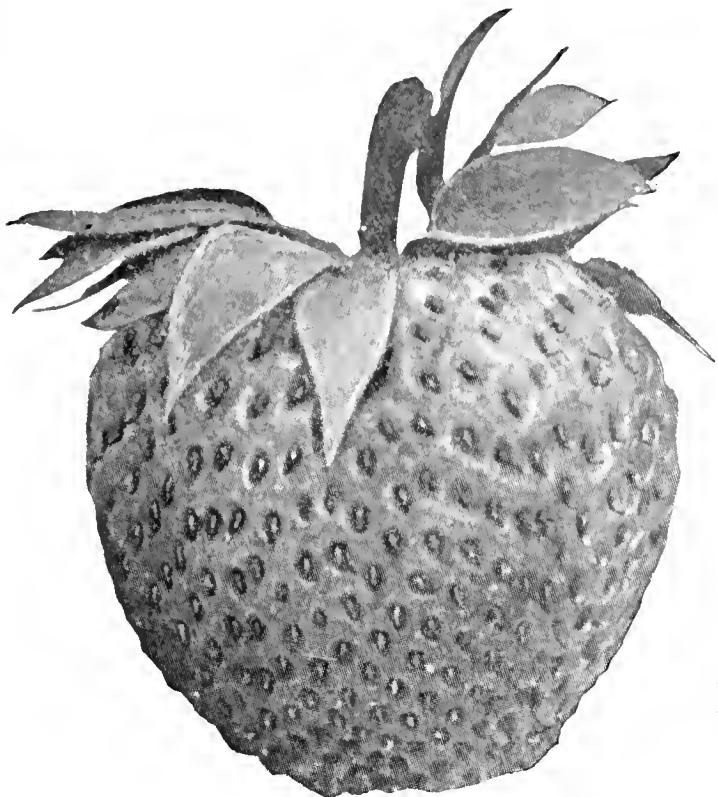
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We have a complete stock of the EVERBEARERS as well as all the STANDARD varieties despite the general shortage in plant crop this season.

Shipments made at any time from now until 1st of May either TO YOU OR DIRECT TO YOUR CUSTOMERS.

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Small orders receive the same careful attention.

EVERY PLANT GUARANTEED TRUE TO NAME

All plants tied 25 to the bunch and each bunch labeled.

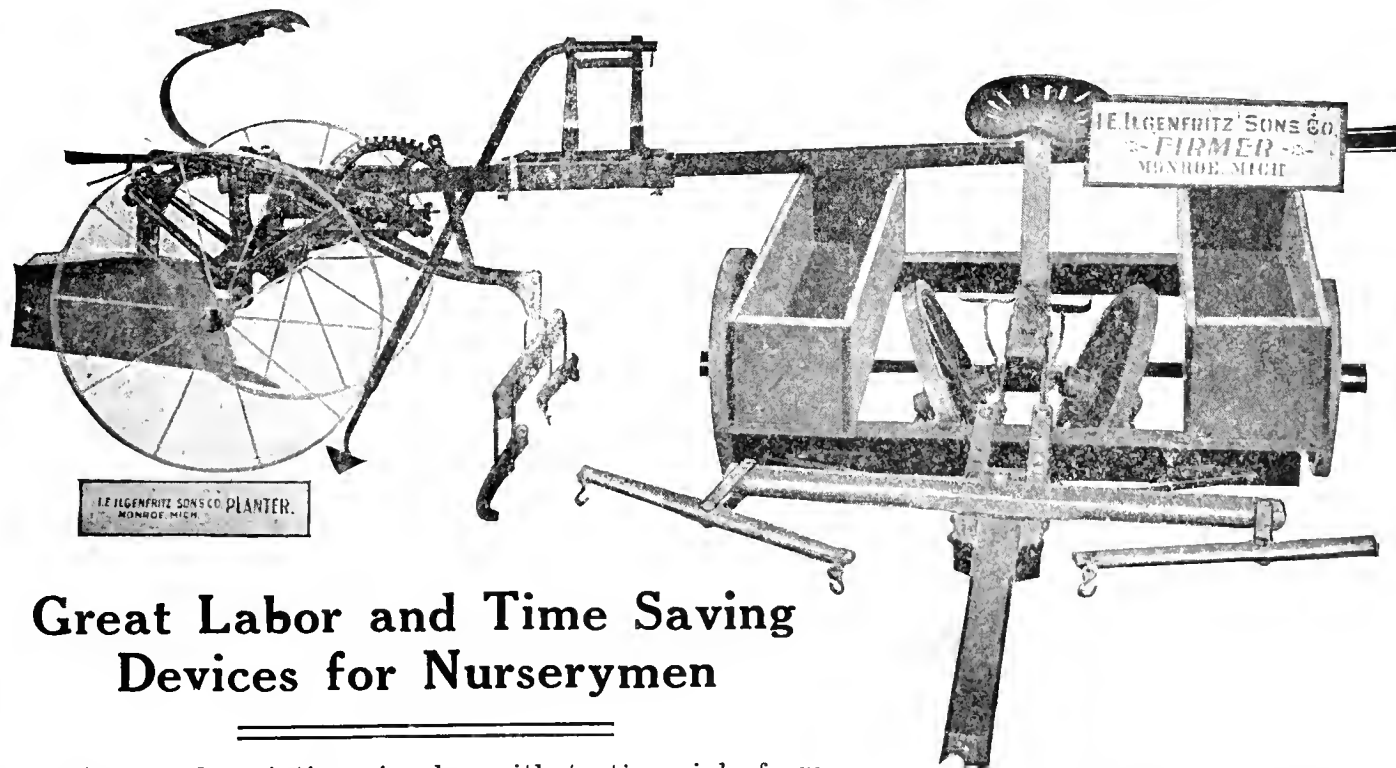
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Let us fill your orders. You will enjoy the praise our plants will bring you.

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Write for descriptive circular with testimonials from leading nurserymen of 17 states of the Union.

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Our motto: "Maximum Quality, Minimum Cost."

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all leading market sorts for Spring 1917

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For sample copy, discounts, etc., address.
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Now is the time to take up with me,—your 1917 requirements in **Mazzard** and **Mahaleb Cherry** and **Myrobolan Plum Seeds**.—It is not too early.—Play safe and do it now.

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Rhododendrons, Clematis, H. P. Roses, Hardy Azaleas, Paeonies, Magnolias, Box Trees, Fancy Conifers, Hydrangeas and Shrubs, our specialties at our **HOLLAND NURSERIES**. Some of the goods on hand here during the packing season.

Peach Seed

We have left only a few hundred bushels, which are of the 1916 crop. The price is pretty stiff. Quotation on request.

If you have any Peach Trees to sell, send us list, with prices.

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The home of good things to plant;—**Euonymus Vegetus** "Evergreen Bittersweet," Japan Iris, German and Siberian Irises in big quantities. Specimen Arbor Vitae, Mugho Pines, Norway Spruce and Norway Maples, big blocks of them, and many carloads of Privet.

Come and see us or let us know your wants.

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NEWARK, N. Y.

ESTABLISHED 1893

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The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

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 Apple, Std. and Dwf. Pear, Cherry, Plum,
 Peach, Quince, Apricot, Small Fruits, Grape
 Vines, Ornamental Trees and Shrubs.

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**PROGRESSIVE AND SUPERB
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and millions of all standard variety. All stock well sprayed and of the very best quality grown. Spring season starts
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**2 1/4-inch
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ROSES

**4-inch
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400 new and standard sorts

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WITH SPECIAL PRICES ON FIRST CLASS STOCK

(First class stock by the way is not any too plentiful)
 Our **MR. JOS. LUNNEMANN**, with headquarters at 14 Stone
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OTHER SPECIALTIES: Gooseberries, Currants.

Send want list for prices.

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Let me quote you on
TREE AND SHRUB SEED
CONIFER AND ACORNS
 A Specialty

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Unusual and rare stock in great varie-
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 New additions constantly being tested.
 Ask for complete descriptive catalog, and
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We are specialists in Hardy Nursery Grown
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 we can supply you with genuine PROGRESSIVE Everbearing
 plants, guaranteed to be TRUE TO NAME and handled so as
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 We have been growing and breeding the Everbearing straw-
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 We invite a personal visit to our grounds during fruiting sea-
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 seed bags, colored plates, half tone cuts and
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Own Root Field Grown

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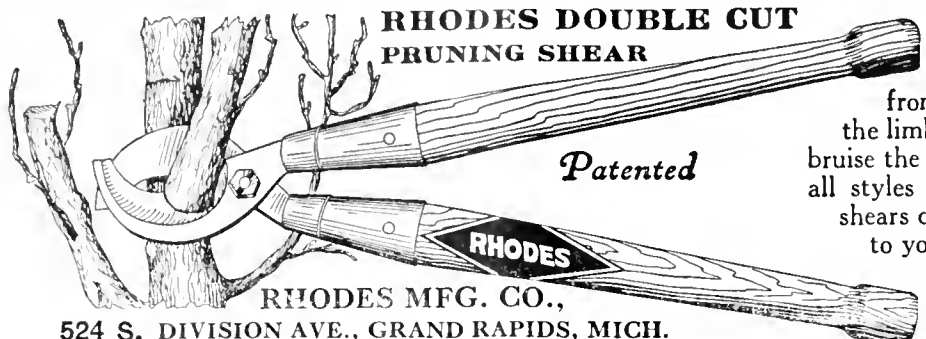
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WILL BE PLEASED TO
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Patented

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THE only
pruner
made that cuts
from both sides of
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Write for
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...ALL GRADES...

Shipments will be made promptly

A. WILLIS & CO.

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SEND US YOUR ORDER TO-DAY

Berberry Thumbergii Seedlings

Get our prices before placing your order.



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Berberry Specialists

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Forest Tree Seedlings

AND

ORNAMENTAL SHRUBS

We offer for spring 1917 our usual line of Forest tree seedlings and Ornamental Shrubs, Cuttings, etc. Write for spring trade list.

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Mr. James B. Duke, of Somerville, N. J., is overstocked and is offering for sale the following specimen stock at greatly reduced prices:

Koster's Blue Spruce, Douglas Spruce and Green Spruce
5 to 12 ft. in height.
Horse Chestnuts—white and red—2½ to 5 in. caliper.
Maples, Norway, Schwedleri and Silver—3 to 6 in. caliper.
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Lilacs, unnamed varieties—6 to 9 ft.
Syringa Japonica—8 to 12 ft.
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DUKE'S FARM

SOMERVILLE, - NEW JERSEY

PLACE YOUR ORDERS NOW FOR
Early Spring Shipments

Cornus Florida

(White Flowering Dogwood)

These were transplanted 2 years ago, making them now well branched and full of fibrous roots.

6-8 ft. high, 3-4 ft. spread,
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CLARENCE E. PINE, Prop.

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Native Trees, Shrubs and Vines

At Special Prices
WHOLESALE ONLY

Sweet Hollow Nurseries
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Avenue Nurseries

Painesville, Ohio

FRUIT TREES

APPLES—Standard. Long list of varieties suitable for the home orchard. All strong, carefully selected stock on whole roots.

APPLES—Dwarf. A few good sorts to offer.

PEARS—Standard. Fine stock of two years trees as good as we have seen this year.

PEARS—Dwarf. Fair supply—largely Duchess.

PEACHES—All grades are perfect trees, both tops and roots. Large stock of Elberta and the new Late Elberta (Wilma).

RASPBERRIES—25,000 Kansas and Plum Farmer, one year and one year transplanted.

BLACKBERRIES—Large stock of root cutting plants, all carefully graded.

ORNAMENTAL TREES

CATALPA BUNGEI—2 year heads, 5 ft. stems.

CATALPA SPECIOSA—8 to 10 feet and larger, straight bodies.

ELM, AMERICAN—Fine block of trees in grades between one and two inch caliper. All transplanted spring 1915.

ELM, SCOTCH—All sizes up to 3 inch caliper.

HORSE CHESTNUT—Splendid lot 2 to 3 inch caliper, straight stems, symmetrical tops.

MAPLE, SUGAR—Several thousand specimen trees, 2 to 4 inch caliper.

SYCAMORE (Oriental Plane)—Large trees in sizes 3 to 5 inches in caliper. Also 20,000 one year for lining out.

ORNAMENTAL SHRUBS

ALTHEAS—Bush and tree shape, 3 to 4 feet.

BARBERRY THUNBERGI—All grades including 2 to 2½ ft.

CORNUS SIBERICA—Several thousand plants 3 to 4 and 4 to 5 feet.

DEUTZIA, PRIDE OF ROCHESTER—Large stock 2 to 3 and 3 to 4 feet.

GOLDEN ELDER—3 to 4 and 4 to 5 ft., plants.

HYDRANGEA P. G.—Good supply of 18 to 24 inch and 2 to 3 feet.

PHILADELPHUS—Quantity of large plants at special low rate.

PRIVET—Large stock California Privet in three popular sizes—15 to 18 inches, 18 to 24 inches, and 2 to 3 feet. Strong grades.

SYMPHORICARPUS VULGARIS (Red Snowberry)—Will make low price on quantity of 2 to 3 ft. stock.

SPIREAS—Anthony Waterer, Billardi, Opulifolia Aurea, Tomentosa and Van Houtte in good supply.

EVERGREENS

Have been in great demand but a fair supply still on hand. Expect usual supply of Holland grown Conifers, Rhododendrons, Boxwood, Kalmias, etc.

Large stock of Mahonia Aquifolia, 18 to 24 inches.

PERENNIAL PLANTS

Hardy Chrysanthemums, Shasta Daisy, Delphinium Chinensis, Hibiscus, Hemerocalis, Iris German, Iris Japan, Tritoma Pfitzeri.

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We Are Prepared To Supply The Trade

ROSES, Field-grown, own roots and budded.
ABELIA GRANDIFLORA. Transplanted, field-grown.
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ENGLISH LAUREL.
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MAGNOLIA FUSCATA.
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LIGUSTRUM JAPONICUM, LUCIDUM, NEPALENSE,
and other good varieties, fine bushy plants.
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BIOTA AUREA NANA (Berckmans' Golden Arbor-
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BIOTA AUREA CONSPICUA.
RETINISPORA. In variety.
JUNIPERUS. In variety.
WISTARIAS. Grafted, best sorts.
APPLES.
JAPANESE PERSIMMONS.
ENGLISH WALNUTS.
MULBERRIES.
SPIRAEA THUNBERGII. A beautiful lot of stocky
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A fine stock of Hackberries, Koelreuteria, Tulip Pop-
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Elms.

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our fine, hardy, northern nut trees
and one nurseryman writes, "Your
trees are the finest ever received."
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T. S. HUBBARD 60.
FREDONIA, N. Y.

The longest established and best known growers of

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And the largest stock in the United States



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A fine stock of leading varieties. One and two years.

BLACKBERRIES

The largest and best stock of root-cutting plants in this
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Our blackberry plants are as well furnished with fibrous roots
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FRENCH and JAPAN PEAR SEEDLINGS

Forest Tree Seedlings

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Peach Trees

Pear Trees

Cherry Trees

Forest Trees

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A Large Stock of

Apple, Pear, Cherry and Peach Grape Vines, Blackberry and Raspberry Plants

And a general line of ORNAMENTAL TREES and SHRUBS. All stock clean and thrifty, the best that can be grown.

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Fruit Trees, Roses, Manetti Stocks

in heavy quantities

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Send us your want list for quotations.

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Headquarters for
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1200 Acres "At it 25 Years"

Strawberries	Currants	Rhubarb
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Blackberries	Grape Vines	Horseradish
Dewberries	Privet	Hardwood Cuttings

100,000 transplanted Raspberry, Blackberry and Dewberry plants for retail trade. See wholesale list before placing your order.

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Manetti Stocks clean and well rooted for grafting or open ground.

Standard, Climbing, Weeping and Dwarf Roses in great variety Rhododendrons, the cream of the Hardy American varieties.

Andromeda floribunda, japonica, and speciosa, bushy budded plants.

Kalmia latifolia.

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Prices and full particulars on application.

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CLEAN COAST GROWN SEEDLINGS
OREGON CHAMPION GOOSEBERRIES
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Write now.

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120 pages, Library Edition

A book of 120 pages, 5x8, of which 16 illustrate leading Roses in natural colors. All the necessary instructions which will be of value to the amateur are presented in clear, simple and concise form. Where, when and how to plant. Fertilizers, Insecticides, Planting, Pruning, Mulching, Winter Protection, with important lists of the best Roses for every imaginable place and purpose. Contains Calendar of Operations, in itself quite valuable. Regular price \$1.00 postpaid. For quantity, prices (2 or more) mention National Nurseryman and address the author.

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Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.

The Bay State Nurseries

North Abington
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This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us est.

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Hill's Evergreens



Hill's Evergreens Grow
BEST FOR OVER HALF A CENTURY

Fifty years ago, it might be said, the Evergreen or Conifer family as generally known commercially in the United States, with few exceptions, consisted of about three or four varieties. Even not more than twenty years ago a dozen or fifteen sorts seemed to satisfy the requirements of the trade demand. Today there are in general use upwards of a hundred varieties, all differing in more or less degree in form, foliage, and habits of growth. Each answering a definite purpose, each filling a definite demand.

Here is a partial list of what we have to offer. If you are thinking of going into Evergreens, or wish to replenish your present stock, let us get into correspondence early, before the rush begins—write today if possible.

Abies Balsamea (Balsam Fir)
Abies Tsuga Canadensis (Hemlock)
Abies Concolor (Concolor Fir)
Abies Douglassi (Douglas Fir)
Abies Nordmanniana (Nordman's Silver Fir)
Buxus Sempervirens (Bush Shaped Boxwood)
Buxus Suffruticosa (Dwarf Edging)
Cedrus Atlantica (Atlantic Cedar)
Juniperus Canadensis (Dwarf Juniper)
Juniperus Canadensis Aurea (Gold. Dwf. Juniper)
Juniperus Counarti (Counarti Juniper)
Juniperus Elegantissima Lee (Lee's Gold. Juniper)
Juniperus Glauca (Silver Cedar)
Juniperus Hibernica (Irish Juniper)
Juniper Pfitzeriana (Pfitzer's Juniper)
Juniperus Procumbens (Japanese Trailing Juniper)
Juniperus Sabina (Savin Juniper)
Juniperus Sabina Tamariscifolia (Gray Carpet Jun.)
Juniperus Schottii (Schottii Juniper)
Juniperus Virginiana (Red Cedar)
Larix Europea (European Larch)
Picea Alba (White Spruce)
Picea Canadensis (Black Hill Spruce)
Picea Excelsa (Norway Spruce)

Picea Pungens (Colorado Blue Spruce)
Picea Pungens Kosteriana (Grafted Blue Spruce)
Pinus Austriaca (Austrian Pine)
Pinus Banksiana (Jack Pine)
Pinus Flexilis (Limber Pine)
Pinus Mugho (Dwarf Mugho Pine)
Pinus Ponderosa (Bull Pine)
Pinus Resinosa (Red or Norway Pine)
Pinus Strobus (White Pine)
Pinus Sylvestris (Scotch Pine)
Taxus Baccata (English Yew)
Taxus Canadensis (American Yew)
Taxus Cuspidata (Japanese Yew)
Taxus Cuspidata Brevifolia (Dwf. Japanese Yew)
Taxus Repandens
Thuja Ellwangeriana (Tom Thumb Arbor Vitae)
Thuja Globosa (Globe Arbor Vitae)
Thuja Hoveyi (Hovey's Golden Arbor Vitae)
Thuja Lutea (Peabody's Golden Arbor Vitae)
Thuja Occidentalis (American Arbor Vitae)
Thuja Orientalis (Chinese Arbor Vitae)
Thuja Pyramidalis (Pyramidal Arbor Vitae)
Thuja Wareana (Siberian Arbor Vitae)
Thuja Woodwardi (Woodward's Globe)

We have found that the main thing with Evergreens is **careful handling**. This means at both ends. We cannot do it all—you must do your part. For best results, small Evergreens should be bedded out under shade for two years in rich soil where they can be frequently watered, after which they can be transplanted out into nursery rows, with little or no loss.

Spring wholesale trade list is ready. Write for a copy.

THE D. HILL NURSERY CO., INC.



EVERGREEN SPECIALISTS
LARGEST GROWERS IN AMERICA

Dundee, Illinois

BOX 401



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NURSERIES

420 ACRES

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FRUIT TREE STOCKS—All Sizes.
 300 varieties of Conifers, 1 to 4 years old.
 1200 varieties of Ornamental Trees and Shrubs, 1 to 3 years old.
 1600 varieties of New and Old Ornamental Trees & Shrubs in all Sizes
 250 varieties of Climbing Plants.
 400 varieties of Conifers, 1 to 4 feet high.
 400 varieties of Perennials.
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STEEL BOX STRAPPING

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½-inch, ¾-inch, 1-inch and wider, cut to any length
 from 8 inches to 72 inches, at lowest possible prices
 Have, sometimes, bargain lots of steel strapping, 1-
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American Steel Band Co.,

888 Progress Street,

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Juniperus communis suecica,	is not the same as Juniperus communis hybernica
“ communis cracovica	“ “ “ “ “ communis suecica
“ Sabina prostrata	“ “ “ “ “ prostrata
Thuya Ellwangeriana Rheingold	“ “ “ “ “ Thuya Ellwangeriana aurea
Taxus cuspidata	“ “ “ “ “ Taxus cuspidata brevifolia
	and so on.

*Be sure that you get your plants correctly named. Write us for information about
 Conifers. We specialize in Conifers and have over 500 varieties.*

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BOSKOOP

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HOLLAND

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PEACH—One-Year Budded

	3-4 in. 6-7 ft.	9-16 in. 5-6 ft.	1-2 in. 4-5 ft.	7-16 in. 3-4 ft.	5-16 in. 2-3 ft.
Alexander	50	50	50	25	25
Beer Smock	1,500	1,000	1,000	1,000	500
BELLE OF GA. ..	15,000	45,000	45,000	15,000	2,000
Bilyeu's			300	300	200
Brackett	300	500	500	400	300
Capt. Ede	100	100	100	100	100
Chair's Choice	100	200	200	100	100
CHAMPION	4,000	4,000	4,000	4,000	4,000
Dewey	50	100	50	50	50
Early Crawford ..	500	1,000	1,000	1,000	500
Edg Beauty	100	200	200	200	100
ELBERTA	15,000	18,000	18,000	11,000	3,000
Eng. Mammoth ..	200	200	400	400	200
Fitzgerald	50	100	100	100	50
FORD'S LT. W. ..	1,800	2,500	2,500	2,500	2,800
Foster	50	100	100	100	50
Fox Seedling	500	2,000	2,000	2,000	500
Francis	500	1,000	1,000	1,000	500
Geary's	100	500	500	500	100
IRON MOUNTAIN ..	2,000	4,000	5,000	4,000	2,000
Kalamazoo	200	800	800	800	200
Lemon Free	100	300	300	300	100
Lorentz	100	400	400	400	100
Miss Lolo	100	200	300	300	100
Moore's Fav.	500	500	500	500	500
Mt. Rose	200	500	500	500	200
New Prolific	200	300	300	300	200
Niagara	400	400	400	400	400
O. M. Free	1,000	1,000	1,000	1,000	1,000
Ray		500	500	500	500
St. John	400	500	500	500	500
Salway	1,000	1,000	1,000		
Stephen's R. R. ..	300	300	300	300	500
Stump	400	400	400	400	400
Waddell	200	200	200	200	200
Walker's V., Free	300	300	300	300	100
Willett	100	200	100	100	100
Wonderful	800	800	800	800	800

APPLE—One-Year Budded

	$\frac{5}{8}$ in. 5-6 ft.	$\frac{1}{2}$ in. 4-5 ft.	$\frac{3}{8}$ in. 3-4 ft.
Baldwin	1,250	500	250
Ben Davis	1,250	500	250
Bonum	100	200	100
Delicious	9,000	4,000	2,000
Fallawater	300	200	100
Fameuse	600	1,200	500
Gano	450	500	250
Gravenstein	600	1,200	500
Grimes' Golden ..	2,000	4,000	2,000
Hubbardston	150	100	50
Jonathan	400	800	400
July	200	200	100
Lowry	150	100	50
Maiden's Blush ..	450	300	150
McIntosh	3,500	3,000	1,500
Northern Spy	1,600	1,200	600
Oldenburg (Duchess)	1,000	2,000	1,000
Paragon (M. B. Twig)	3,000	3,000	1,000
Rambo (Winter) ..	200	200	100
Red Astrachan	200	200	100

R. I. Greening	2,500	1,000	500
Rome Beauty	1,500	1,000	500
Smokehouse	1,250	500	250
Spitzenburg	200	200	100
Stark	850	100	150
Stayman (Stayman's Winesap)	3,000	6,000	3,000
Sweet Bough	300	100	100
Tompkins King	300	100	100
Wagner	400	200	100
Wealthy	1,000	2,000	1,000
William's Ely. Red	12,500	5,000	2,500
Winter Banana	1,800	2,500	800
Wolf River	200	200	100
Yel. Transparent	15,000	10,000	5,000
York Imperial	500	1,000	500

APPLE—Two-Year Budded

	11-16 in. 6-7 ft.	$\frac{5}{8}$ in. 5-6 ft.	$\frac{1}{2}$ in. 4-5 ft.
Baldwin	8,000	4,000	2,000
Ben Davis	500	1,000	500
Fameuse	1,000	1,000	1,000
Gano	400	400	200
Gravenstein	3,800	1,500	700
McIntosh	5,000	5,000	2,500
Northern Spy	6,500	4,000	1,500
Paragon (M. B. Twig)	2,000	4,000	2,000
Rambo (Winter)	100	100	100
Red Astrachan	1,000	1,000	700
R. I. Greening	6,000	5,000	2,000
Rome Beauty	500	1,000	500
Smokehouse	1,400	800	400
Spitzenburg	400	400	100
Stark	3,800	2,500	700
Starr			700
Stayman's	4,200	4,500	1,200
Wealthy	800	500	700
Wm. Early Red	2,000	4,000	2,000
Wolf River	400	200	100

APPLE—Three-Year Budded

	1 $\frac{1}{2}$ in.	1 $\frac{1}{4}$ in.	1 in.
Baldwin	5,000	5,000	4,000
Chenango	25	25	25
Car. Red June	25	25	25
Talman's Sweet	50	50	50
Spitzenburg	350	350	150
Fourth of July	75	75	75
P. W. Sweet	75	75	75
Winter Rambo	25	25	25
Summer Rambo	25	25	25
McIntosh	1,550	1,550	550
M. B. Twig	5,000	5,000	5,000
Stayman	5,000	5,000	5,000
Northern Spy	200	200	200
R. I. Greening	200	200	200
Stark	1,200	1,200	1,200
York Imperial	2,000	2,000	2,000

BARTLETT PEARS—Two-Year Budded

	$\frac{3}{4}$ in.	$\frac{5}{8}$ in.	$\frac{1}{2}$ in.	3-4 ft.
Bartlett	9,000	4,000	1,000	1,000

KEIFFER PEARS—Two-Year Budded

	1 in.	$\frac{3}{4}$ in.	$\frac{5}{8}$ in.	$\frac{1}{2}$ in.
Keiffer	5,000	16,000	15,000	4,000

SEND US YOUR WANT LIST

HARRISONS' NURSERIES,
Berlin - - Maryland



THE NATIONAL NURSERYMAN



MARCH, 1917

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

*Peach, Gooseberries,
Currants, Berberis,
Spirea Van Houtte,
Other Ornamental Shrubs,
H. P. Roses, Etc.*

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.
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MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

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Our Specialty

A large and complete line of high quality Nursery Stock
for the wholesale trade.

CARLOTS OF

Apple, Cherry, Peach. Green
Ash (*Fraxinus Lanceolata*), Elm American
White, Maple Silver, Sycamore
American, Shrubs in Assortment

Send for trade list and bulletins. Let us quote your wants.

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A Handbook and Guide to Nurserymen



The New 1916 edition has been mailed to
our Customers. Interested parties will please
apply for a copy.

This Catalogue contains, besides the extensive assortments
of hardy ornamentals, much useful information.



FELIX & DYKHUIS
Boskoop, - - Holland
WHOLESALE NURSEYMEN

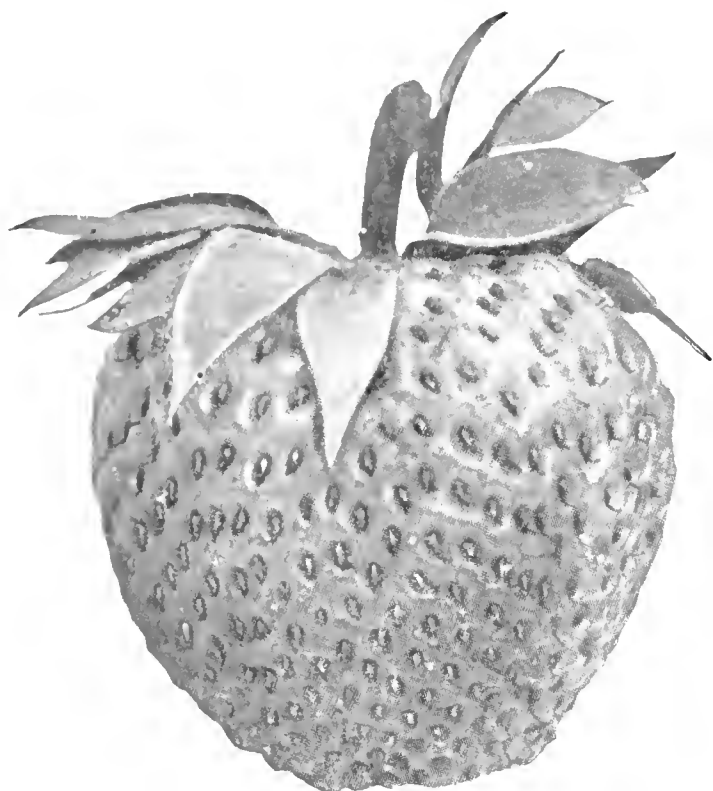
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go forward. We can give you
quick action. Do you read
our Bulletins carefully? They
will save you money. Next
one out about March 15th.

C. R. BURR & CO.

Manchester, : Conn.

500 Acres Under Cultivation



Strawberry Plants

SEND US YOUR ORDERS

We have a complete stock of the **EVERBEARERS** as well as all the **STANDARD** varieties despite the general shortage in plant crop this season.

Shipments made at any time from now until 1st of May either **TO YOU OR DIRECT TO YOUR CUSTOMERS.**

No order too large for us to handle with ease.

Small orders receive the same careful attention.

EVERY PLANT GUARANTEED TRUE TO NAME

All plants tied 25 to the bunch and each bunch labeled.



Our plants are hardy everywhere, strong, vigorous, healthy, with an unsurpassed root system.

NEW ILLUSTRATED BERRY BOOK AND WHOLESALE PRICE LIST NOW READY. SEND FOR YOUR COPY TODAY.

Let us fill your orders. You will enjoy the praise our plants will bring you.

The W. F. ALLEN CO., 100 Market Street, Salisbury, Maryland

FOR THE SPRING OF 1917

 We offer our usual line of  **Apple, Plum, Cherry, Peach, Shade and Ornamentals.**

WE CAN FURNISH IN LARGE QUANTITIES AND CAR LOTS

2 year Montmorency & Early Richmond Cherry
American Elm, 1¼ to 4 inch in caliper

Norway Maple, 8-10 ft. and 10-12 ft.

Soft Maple, 6-8 ft., 8-10 ft., 2½-3 in. caliper,
3-3½, 3½-4.

Catalpa Bungei, 1 and 2 year heads

C. M. Hobbs & Sons

Marion County

Bridgeport, - - Indiana

EVER BEARING STRAWBERRY PLANTS OUR SPECIALTY

We grow more strawberry plants for The Trade, than any other nursery in the World, over 100 of the leading standard varieties.

We ship direct to your customers under your tags or any way you instruct us. Plants that are strong and vigorous, and absolutely true to name. About 100 acres of our crop this season was grown on land that was never set to plants before and such masses of roots you never saw. Such stock will not only please you but will make you customers that will come back with their "repeat" orders.

We can fill your orders any time from now until May 1st, with hardy grown plants that will live and do well anywhere strawberries are grown. We have upwards of 4,000,000 **Progressive**, and **Superb**, the best of the ever-bearers. At prices that will suit you if you are in the market. We also have Dewberry plants that are strictly A No. 1. We are short on Raspberries, and Blackberries, and shall be pleased to exchange—or buy good stock.

Ask for price list if interested.

E. W. Townsend
100 Vine St., - SALISBURY MD.

PAINESVILLE NURSERIES

FRUIT TREES

—We have been getting some very good orders for fruit trees and indications point toward a renewal of activity among orchardists. At this writing, we are still strong in a fairly complete list of PEARS. We have often been told,—and sincerely believe,—that our particular location, soil and atmosphere produces the most perfect Pear trees put upon the market. Can furnish DWARF trees yet in Anjon, Bartlett, Clapps, Duchess, Howell, Kooner, Kieffer, L. Bonne, Ross-

ney, Seckel, and Vermont Beauty. PEACHES.

With few exceptions, are still in position to fill our usual complete list; in the stock which rarely has needed an apology, and sells on its merits. PLUMS. can still make attractive offers in both European and Japan sorts. Although heavily sold, are not out of the running in Apples, Cherries, Quinces Etc. Prices are right.

SMALL FRUITS

War times induce earnest attention to the planting of food-producing stock which yields quick returns. All berries should be planted heavily this year. We are well supplied with gilt edge CONCORD GRAPES,—in fact are in good shape to supply nearly all the popular sorts. GOOSEBERRIES. We aim to be a leading source of supply for this small fruit, and have a fine supply in variety. CURRANTS. Can furnish the leading red kinds in variety, and a good white berry. RASPBERRIES and STRAWBERRIES are still good prospects; and can yet offer a few leading varieties of BLACKBERRIES. Prices are right.

IF YOU NEED

SEEDS

PREPARE TO PLANT THEM NOW. TRY OURS

ORNAMENTAL TREES

—Owing to the unprecedented demands upon our great blocks of Deciduous and Evergreen Trees during the past two years, we cannot honestly shout about quantities. There is no getting around the fact that the larger sizes of all standard trees are very scarce throughout the country. Understand, we are not sold out; we have a general line of as good ornamentals as are grown, and can handle normal orders to satisfaction.

Will make special mention at this time, of CUT-LF. WPG. BIRCH, 5 to 6 feet; EUP. LINDENS, 2-2½ inch, 2½-3 inch and 3-4 inch; ASH-LF. and JAPAN MAPLES, and a limited quantity of NORWAYS, AM. CHESNUTS, in 3-4 4-5, 5-6 and 6-8 feet. EVERGREENS are up and hard to get; but ask us. We probably have what you want. Prices are right

SHRUBS & PLANTS

We have an enormous retail trade in HEDGE PLANTS,—they seem to like our grading,—but can still satisfy some stiff wholesale demands for PRIVET and BARBERRY. The general line of shrubs is still open. Please don't ask us for any more Hybrid Tea ROSES; they're gone. Can do fairly well with H. P. lists, and are strong on good CLIMBERS. Only a few odd "Baby's" left. HARDY PERENNIAL PLANTS. Among our choice and varied assortment of Perennials, we are purposely long on these items usually oversold. Bleeding Heart, German Iris, Hollyhocks and Yucca. Cannas. Are booking orders for started plants. April delivery. Prices are right.

Jackson & Perkins Company

Growers of the "Preferred Stock,"—the "Made in America" kind, which is right here *where* you want it, *when* you want it and *as* you want it.

Newark, - - New York

For 1916-1917 we have the largest stocks that we have ever grown, including good supplies of the usual "J. & P." specialties.

In Ornamentals:

ROSES, field-grown TREE-FORM HYDRANGEAS
CLEMATIS TREE-FORM LILACS
(Largest stocks in America)
AMPELOPSIS VEITCHII DUTCHMANS PIPE
(Not hyphenated. Born and raised here)

SHRUBS

(Extra fine stock)

PERENNIAL PLANTS
(Large assortment)


SHADE TREES

In Fruits:

APPLES PEARS PLUMS
PEACHES QUINCES
(None finer grown)
CURRANTS GOOSEBERRIES

Jackson & Perkins Company

Newark, - - New York

 We sell to the trade only. We do not compete with our own customers by selling to planters.

Heikes—Huntsville—Trees



WE ARE PREPARED
To Meet Your Needs in
Peach, Apple, Cherry, Pear, Plum, Compass-Cherry-Plum, Apricot, Pecan Seedlings, Privets, Roses (budded and own-root), Abelia Grandiflora, Berberis Thun., Spirea V. H. and Reevesiana, Lonicera Fragrantissima and Halleana, Kudzu Vines, and Sundry Ornamentals.

In good assortment of standard varieties. All our own growing.

Send us your orders and inquiries.

ROSES, Budded H. P's. One of our Specialties.

We grow them by the hundred thousands.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

FIFTIETH YEAR

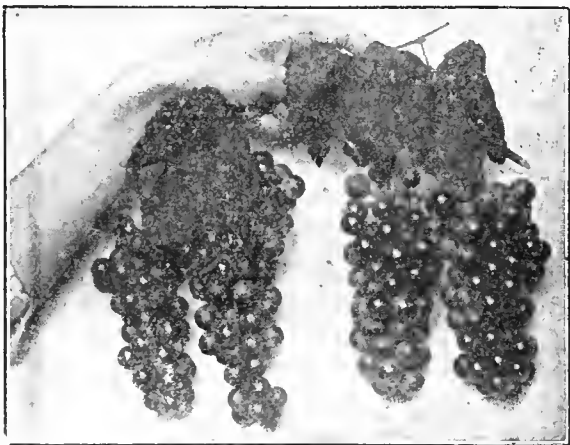
T. S. HUBBARD GO.

FREDONIA, N. Y.

The longest established and best known growers of

Grape Vines

And the largest stock in the United States



CURRANTS and GOOSEBERRIES

A fine stock of leading varieties. One and two years.

BLACKBERRIES

The largest and best stock of root-cutting plants in this country. All the best varieties. Snyder in great quantity. Our blackberry plants are as well furnished with fibrous roots as our well-known grape vines.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of
Own Root Roses

ORNAMENTAL TREES SHRUBS

BERRIES CLEMATIS

EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

70 Years

1000 Acres

When writing to Advertisers please mention the National Nurseryman.



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE



THE

North-Eastern Forestry Co.

CHESHIRE

...Connecticut...

Princeton Nurseries

Princeton - New Jersey

**ORNAMENTALS and
at WHOLESALE ONLY**

We do not sell to Department Stores

The patronage of The Trade is solicited

February 1, 1917.

J. H. Skinner & Co.

Topeka, - Kansas



Apple Seedlings

**Japan and French
Pear Seedlings**

Forest Tree Seedlings

FRUITS TREES

SMALL FRUITS

Rhubarb, Myatt's Linnaeus, divided roots, pure stock; Shade Trees, including a fine lot of Soft Maple and White Elm.

CATALPA BUNGEI

6½ foot stems, straight and smooth

Bechtel's Double Flowering Crab

Ornamental Shrubs

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

**Rawhide Brand of Shipping
Tags and Tree Labels**

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

ORNAMENTAL TREES, SHRUBS, VINES, EVERGREENS HARDY HERBACEOUS PLANTS 225 Acres

Entirely devoted to the growing of the best quality of ornamental nursery stock.

WHOLESALE ONLY

We also grow the "unusual" things, you cannot find elsewhere.

Small Trees and Shrubs for
Planting in Nursery Rows.

We shall have our usual supply for Spring delivery. Catalogue ready January first.

RAFFIA HEADQUARTERS

Supply of our usual brands on hand at all times.

Thomas B. Meehan Co.,
WHOLESALE NURSEYMEN
Dresher, - Penna.

THE NEW MACTAWA EVERBEARING BLACKBERRY

The only everbearing Blackberry, originated by Alfred Mitting's, Holland, Mich., 1909; a cross between the Giant Himalaya and Eldorado Blackberries. It fruits from the new wood, spring, summer, and fall. The hardiest Blackberry in the United States. Not a single kick to date, but all praise it.

John Lewis Childs is selling an immense number of these plants this year. One of our many customers, of Memphis, Tenn., says it is sure a hummer. Write today for full descriptive catalog of this wonderful Blackberry, wholesale price list will also be sent.

**H. J. & Alfred Mitting's
Nurseries**

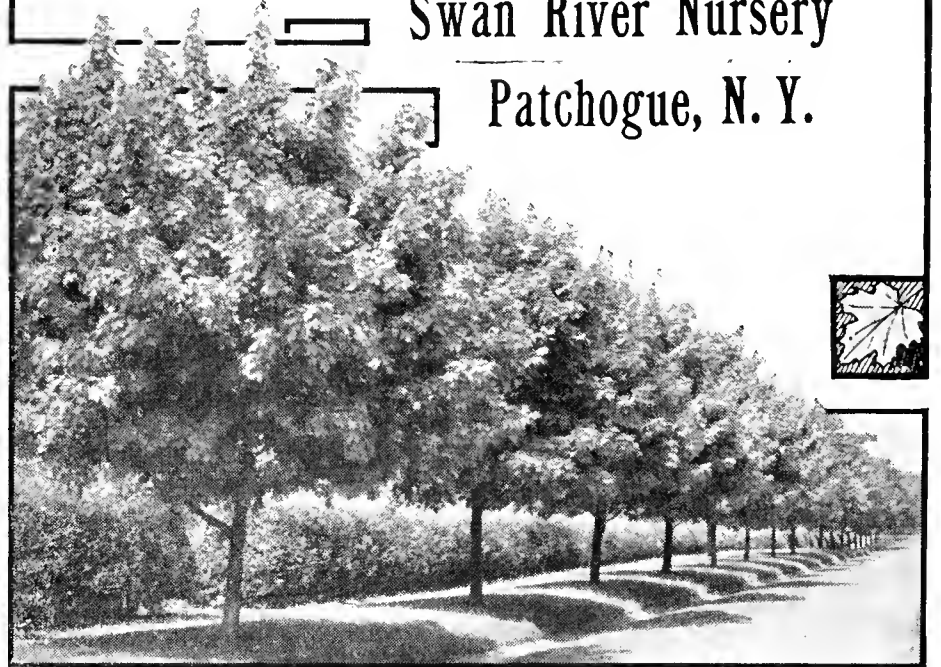
Offices in The First Trust
Savings Bank Building

MORRIS, ILL.

Big Norway Maples For Spring Delivery

Just what you have been looking for. Straight trunks, 1 to 3½ inch caliper, heavy tops and fibrous roots. Big enough for immediate effect. You can sell a lot of these trees to enterprising planters. Write to-day for quality prices.

**Swan River Nursery
Patchogue, N. Y.**



EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa.

The Best Tree Digger on Earth



Used and Recommended by Leading
Nurserymen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

Stark Bros. Nursery & Orchards Co.
LOUISIANA, MO.

THE BEST IN NURSERY PRODUCTS

We carry a full line of fruit and ornamental trees, evergreens, shrubs, etc. Send us your list of wants.

Listed below are some real winners. If what you need is not here, write for our trade list.

15,000 Oriental Planes from 1 1/4 to 3-inch caliper. A large stock of Sugar Maples, American Elms, Carolina Poplars, Lombardy Poplars, Double Flowering Japan Cherries, Weeping Japan Cherries, Flowering Apples, Flowering Peaches, Magnolia Tripetela, Japan and American Judas, English Walnuts, Japan Walnuts, California Privet, fine, 2 to 3 ft. and 3 to 4 ft.

Apples and Peaches, 10,000 Downing Gooseberries, 2 years, No. 1.

**HOOPEs, BRO. & THOMAS
COMPANY**

Established 1853

West Chester, Pa.

Maple Avenue Nurseries

Philadelphia Office:

222-3-4-5 Stephen Girard Building

21 South Twelfth Street



BERRY'S Wholesale Nursery

Small fruit plants in variety; rhubarb; horseradish; California Privet; Barberry Thunbergii; Hydrangea P. G.; Spirea Van Houghti; Peonies—home grown and imported; Imported Boxwood, etc.

Stock in storage. Can ship any time.

See list before placing your order.

P. D. BERRY,

Dayton

Ohio

Franklin Davis Nurseries, Inc. BALTIMORE - MARYLAND

OFFER FOR SPRING 1917

APPLE 1-2-3 Year

Heavy stock of McIntosh, Wealthy, Baldwin and all leading varieties.

Grimes Golden topworked 1 and 2 yr. heads.

PEACH

The finest lot we have ever grown. Heavy on Elberta, Carman, Belle of Ga., Crawford's, Salway, and all the leading kinds.

STD. PEAR

Kieffer 2 and 3 yr., all sizes at a low price. Garber, LeConte, &c.

SHADE TREES

Oriental Planes—the coming tree for city and suburban planting, all sizes. Special prices on transplanting sizes. Norway, Silver and Sugar Maples; Carolina and Lombardy Poplars; Red, Pin, and Willow Oaks, etc.

PRIVET CALIFORNIA

By the carload 1 and 2 yr., all sizes.

ASPARAGUS 2 Years

Barrs, Conovers, Giant, Palmetto.

PEACH SEEDS

1000 Bushels Promiscuous.

WRITE for prices and wholesale Trade List.

Samples upon request.

Place your orders early.

When writing to Advertisers please mention the National Nurseryman.

POPLARS
Lombardy-or-Carolina
any-Height-or-Caliper
SUGAR MAPLES

NORWAY MAPLES
ALL-SIZES-AND-CHEAP

CALIFORNIA PRIVET
Any-Height-in-Quantity

Chas. Momm & Sons, Irvington, N. J.

You can save **Time and Money**
if you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.
Write for particulars

Sarachan & Rosenthal
64-66 Hanover Street
Rochester, - - New York

Complaints or Compliments?

When a purchaser says "don't send me any more stuff like that" you feel you have lost a customer.— But when he says "that's the best you ever sent and you may duplicate the order" you know you have made a friend.

Fasten your friends with stock that will stand every test, and that has made satisfied customers for us for more than twenty years.

Send for our wholesale list or consult our salesman who will call soon.

F. J. Grootendorst & Sons
Room 1101 10 BROADWAY
New York N. Y.

V.G.'S VERY GOOD
HARDY NURSERY STOCK SUCH AS
AZALEAS, BUXUS,
CONIFERS, EVERGREENS,
PAEONIES, MAGNOLIAS,
RHODODENDRONS, ROSES, ETC.

Offered by

VAN GELDEREN & CO.

Wholesale Nurseries

Ask for Catalogue BOSKOOP (Holland)

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Spring 1917

GRAPE VINES—One and two years old. Varieties largely Moore's Early, Concord and Niagara. Also Scarlet or Crimson Clover Seed and Cow Peas. Free from weed seeds, all recleaned and guaranteed first class.

Correspondence solicited. Price list upon request.

CHAS. M. PETERS
P. O. Address, Salisbury, Wicomico County, Md., R. F. D. 3
Long Distance Phone and Telegraph, Salisbury, Md.

The Framingham Nurseries

200 Acres
High Grade
Trees, Shrubs,
Evergreens,
Vines, Roses,
Etc.



Fine Stock
of
Rhododendrons
Kalmias
and
Andromedas

Send for Price List

W. B. WHITTIER & CO.

FRAMINGHAM, MASS.

We have a splendid stock of
Grape Vines

and other small fruit plants for the Nursery trade, graded up to the highest standard and sure to please you.

Give us a trial order, send in your list now for quotations

WHELOCK & CONGDON

SUCCESSORS TO
WILLETT & WHELOCK

North Collins, - N. Y.

Foster-Cooke Co.

Nurserymen Fredonia, N. Y.

Growers of

Grape Vines, Gooseberries, Currants

One and two years old. Graded up to the highest standard. Our stock never looked better. Write us for catalog. Send us your list of wants. Our prices are right, our stock A No. 1.

We grow our Stock up to **QUALITY** and **GRADE**, not down to a price. Nevertheless, our prices are always in line, you can't afford to pay less, and there's no sense in paying more. If you are pleased with what you have been getting, you will be better pleased with our stock.

CALIFORNIA PRIVET

Over two million plants of superior quality

All sizes from one foot to four feet

Very low rates in carload lots

Also Amoor Privet and Berberis Thunbergii in quantity

J. T. LOVETT, Little Silver, New Jersey

Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

Leading Specialties for Spring 1917

Cherry, Two Year, extra fine, leading varieties
in car lots

Cherry, one year, 11-16 up and smaller grades
Our Blocks of Cherry are perhaps the largest
in the country

Std. & Dwf. Pear, Japan Plum, Compass Cherry

Peach, One Year, Car lots or less

Weeping Mulberry and Bungei Catalpa

Hardy Budded Pecans and English Walnuts

WE OFFER

Grape Vines, Currants and Gooseberries
in all varieties and grades

—also—

Grape and Currant Cuttings and Light
Grade of Vines for Lining Out
in Nursery Rows

WRITE FOR PRICES

F. E. SCHIFFERLI, Fredonia, N. Y.

**We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS**

FOREST TREE SEEDLINGS we only have in limited
supply this season, and would advise placing your orders
early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade
list ready.

The Willadean Nurseries
Sparta, Ky.

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

We offer for Spring 1917

500,000 PEACH, 40 Varieties, 1 year buds

CALIFORNIA PRIVET, 1 year and 2 year

ASPARAGUS, 1 and 2 year

DOWNING GOOSEBERRY PLANTS, 2 year

BARBERRY THUNBERGI, 2 and 3 year transplanted

Can supply the above stock in car load lots or less, also,
have a large stock of Rhubarb, Cumberland Raspberry
Plants, Spireas, Deutzia Assorted, nice specimen plants.
Evergreens, Horse Chestnut, N. Maple, Lombardy Poplar
and Planes, etc.

PEACH TREES, CALIFORNIA PRIVET, ASPARAGUS,
RHUBARB, Etc., in storage, can ship any time.

We will make attractive low prices for early orders
Send List of Wants

For FUMIGATION With
HYDROCYANIC ACID GAS
“CYANEGG”

Sodium Cyanide in egg shape, each egg weighs as
near one ounce as possible. Destroys scale insects
on Fruit Trees, Nursery Stock, Plants under glass
and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.
100 WILLIAM ST. - NEW YORK, N. Y.

WOOD LABELS

For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite,
combined with the quality of our product is un-
surpassed.

Samples and prices are at the command of a
communication from you.

Dayton Fruit Tree Label Co.
South Canal St., Dayton, Ohio



Hill's Evergreens

SINCE 1855

For over half a century our main business has been to give satisfaction.

Many Nurserymen are pushing the Evergreen feature of their business with increasingly profitable results. As this branch of your business develops, draw on this great central evergreen establishment for your requirements. We are the most extensive Evergreen specialists in America and have added to a particularly favorable, natural situation, the most up-to-date facilities, equipment, and skilled workers obtainable.

"Give every customer more than he expects" has been my motto from the first. Over half a century of experiment, careful study and hard work have helped to build a reputation for quality, which in turn has helped develop the largest business of its kind in America.

Abies Balsamea (Balsam Fir)
Abies Tsuga Canadensis (Hemlock)
Abies Concolor (Concolor Fir)
Abies Douglassi (Douglas Fir)
Abies Nordmanniana (Nordman's Silver Fir)
Buxus Sempervirens (Bush Shaped Boxwood)
Buxus Suffruticosa (Dwarf Edging)
Cedrus Atlantica (Atlantic Cedar)
Juniperus Canadensis (Dwarf Juniper)
Juniperus Canadensis Aurea (Gold. Dwf. Juniper)
Juniperus Counarti (Counarti Juniper)
Juniperus Elegantissima Lee (Lee's Gold. Juniper)
Juniperus Glaucia (Silver Cedar)
Juniperus Hibernica (Irish Juniper)
Juniperus Pfitzeriana (Pfitzer's Juniper)
Juniperus Procumbens (Japanese Trailing Juniper)
Juniperus Sabina (Savin Juniper)
Juniperus Sabina Tamariscifolia (Gray Carpet Jun.)
Juniperus Schottii (Schottii Juniper)
Juniperus Virginiana (Red Cedar)
Larix Europea (European Larch)
Picea Alba (White Spruce)
Picea Canadensis (Black Hill Spruce)
Picea Excelsa (Norway Spruce)

Picea Pungens (Colorado Blue Spruce)
Picea Pungens Kosteriana (Grafted Blue Spruce)
Pinus Austriaca (Austrian Pine)
Pinus Banksiana (Jack Pine)
Pinus Flexilis (Limber Pine)
Pinus Mugho (Dwarf Mugho Pine)
Pinus Ponderosa (Bull Pine)
Pinus Resinosa (Red or Norway Pine)
Pinus Strobus (White Pine)
Pinus Sylvestris (Scotch Pine)
Taxus Baccata (English Yew)
Taxus Canadensis (American Yew)
Taxus Cuspidata (Japanese Yew)
Taxus Cuspidata Brevifolia (Dwf. Japanese Yew)
Taxus Repandens
Thuya Ellwangeriana (Tom Thumb Arbor Vitae)
Thuya Globosa (Globe Arbor Vitae)
Thuya Hoveyi (Hovey's Golden Arbor Vitae)
Thuya Lutea (Peabody's Golden Arbor Vitae)
Thuya Occidentalis (American Arbor Vitae)
Thuya Orientalis (Chinese Arbor Vitae)
Thuya Pyramidalis (Pyramidal Arbor Vitae)
Thuya Wareana (Siberian Arbor Vitae)
Thuya Woodwardi (Woodward's Globe)

HILL'S SPECIMEN EVERGREENS

New, rare and standard varieties, in small, medium and large sizes, supplied in perfect specimens, with ball and burlap. By far the largest and most complete assortment in America.

SMALL EVERGREENS FOR BEDDING OUT

We grow millions of Evergreen Seedlings, rooted cuttings, grafts, etc., every season. Annual out-put 10,000,000 plants. Prices are low and plants are carefully handled. The plants should be carefully bedded, shaded and watered.

HILL'S TRANSPLANTED EVERGREENS

This includes stock which has been transplanted one and two times, the strongest of which can be lined right out in the nursery row at once. Very economical size to handle and gives quick, satisfactory results.

DECIDUOUS TREES AND SHRUBS

Our leaders, Norway Maple, American White Elm and Japanese Barberry.

HILL'S BOXWOODS

Pyramids, Standard, Globes, Bush, Dwarf—one of our leading specialties. Stocked in enormous quantities.

HILL'S BAY TREES

Standards, Half Standards, Pyramids. We can save you money and give better quality. Let us prove it.

HILL'S EVERGREEN WINDOW-BOX PLANTS

All hardy and durable sorts, best selection, lowest prices. Prepare for your share of trade in Winter Evergreen boxes. This line offers grand opportunity for Nurserymen to increase sales and profits.

HILL'S EVERGREENS FOR TUBBING

Clipped specimens in Thuyas, Junipers, etc., in Pyramids, Globes and natural shape, in large assortments.

DECORATIVE AND FORCING STOCK

Complete stock in this line of all leading sorts. Write for prices.

Write for Complete Wholesale Trade List.

THE D. HILL NURSERY CO., INC.



EVERGREEN SPECIALISTS
LARGEST GROWERS IN AMERICA

Dundee, Illinois

BOX 401



The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated

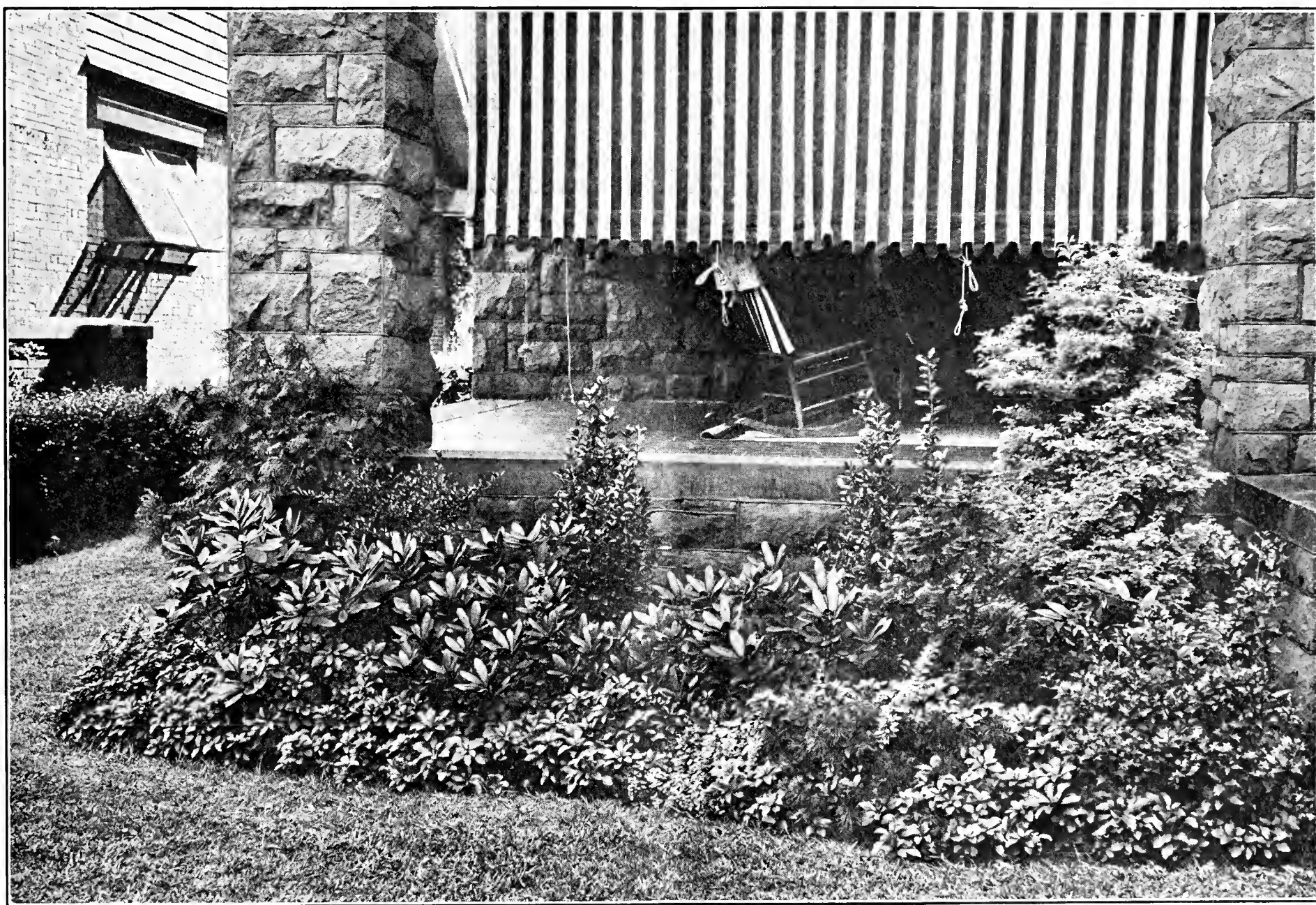
Vol. XXV.

HATBORO, PENNA., MARCH, 1917

No. 3

BASE PLANTING

Evergreen Shrubs



A tasteful and practical base planting, largely composed of Rhododendrons and other broad leaved evergreens.

THE evergreen shrubs form the most desirable group of plants for the base plantings of buildings, and we may as well admit the most costly and unless planted with knowledge, the most uncertain.

Naming them in groups they are the Rhododendrons, Evergreen Azaleas, Hollies, both English and Japanese, Osmanthus, Cherry Laurel, Abelia, Mahonias, Aucubas, Box, Evergreen Ligustrums, Evergreen Euonymus, Yews and Andromedas. These about complete the list of those

hardy enough to stand the northern winter conditions. The list can be very largely increased for points south of Washington, D. C.

Speaking of them in groups, one cannot be very specific as to their hardiness or adaptability, as different species and varieties vary greatly in this respect.

It is up to the planter to know them and the conditions they require, if the best results are to be obtained.

Requirements for success are shelter from drying

winds, acid rather than lime or alkali soil, abundance of humus such as peat, leaf soil, very well rotted manure; good drainage yet constant moisture.

Anyone that has done much planting around buildings knows that these conditions are rarely found, but the nearer they can be provided the better will be the success.

While the requirements are exacting they are by no means difficult to obtain, and are well worth the effort as no other group of plants furnish so well near masonry, and it is but fitting that when no expense has been spared on the building, or skill and effort by the architect and builder, our profession should furnish the most appropriate and best material for finishing the picture.

As a group practically all the evergreen shrubs are imported, but there is no real reason why they should be, if American nurserymen would rise to the occasion and plan to grow them.

The accompanying illustration shows a tasteful and practical arrangement insuring an attractive appearance winter and summer. The Rhododendrons which will be readily recognized give the necessary display of bloom in the spring to relieve the monotony. The tall plant in the right hand corner is the *Retinispora squarrosa* and the one in front of it *Retinispora obtusa*, *Retinispora pisifera* in front of the pier. With these three exceptions they are all broad leaved evergreens. *Osmanthus aquifolia* on the right, *Euonymus Japonicus* and *Ilex crenata* in the background. The foreground being planted with *Pachysandra terminatis*, a capital little plant for the purpose, and the Rhododendrons forming the central feature. Such a selection will not get too large for the position for a long time, and are much more pleasing and fitting than a group composed of the more formal growing evergreens so often seen in such a position.

Would A National Retail Association Benefit The Entire Trade?

By J. L. Mayhew, Waxahackie, Texas. Read at the Annual Meeting of the Western Association of Nurserymen

I KNOW of no law against the organization of such an association and, personally, had given the matter no serious consideration until I was asked to prepare an address for this occasion. I know of many things I would have preferred talking about, but I always feel inclined to attempt whatever my friends ask me to do, and the chairman of this program committee is my friend. This is my apology for speaking on this subject.

I suppose this subject originated at Milwaukee last June and is the result of a certain set of resolutions relative to trade lists, but in reality it dates further back, for I remember that some of those responsible for this resolution were very seriously opposed to the adoption of the new constitution and by-laws adopted at Detroit in 1915. I would much prefer to address myself to these resolutions than to debate the advisability of a retail association, but as the National Association adopted these resolutions, that particular Association is the proper place for a reconsideration of the matter, hence I shall stick to my subject.

The world is divided largely into two classes, those who do not believe in organization, who are "agin" all forms of organized effort, and those who allow their ideas of organization to run riot. And again, those who believe that organization to be effective should take special cognizance of their particular business, doing for them what they have not been able to do for themselves. The members of this and similar organizations take the position that organization must be along lines of and for the com-

mon good, and that the individual benefits resulting from organized effort are incident thereto.

It is hard for us to get away from the paternalistic in government, whether it be organization for the proper safe-guarding of society, which finds expression in municipal, state, and federal laws, or organization within social, business, or religious lines. The question, what is this particular organization doing for me, rather than what it is doing for the common good, is a question that will not down. We are so inclined to view life from our own circumscribed environment, and I think I am not far wrong when I say that this question of retail organization was first conceived in a spirit of retaliation against imagined wrongs. "The retailer is not getting a square deal in the American Association of Nurserymen, because all the affairs of the Association are in the hands of those who represent wholesale interests." Have you not heard such an expression, coupled with the veiled threat that unless certain policies believed to be inimical to the interests of the retailer were abolished that the retailers would secede and form an association among themselves. I believe, men, that beyond any sort of question this position is dead wrong and that only harm to the nursery interests as a whole could come from a further agitation of this question.

IS THERE GROUND FOR COMPLAINT ON THE PART OF ANY MEMBER OF THE AMERICAN ASSOCIATION OF NURSERYMEN?

I hold no brief to defend those who have in the past been responsible for the affairs of the American Associa-

tion of Nurserymen, but this one thing I know, and you know, that there never lived a truer and more unselfish corps of men than those who have been responsible for the Association's affairs. They have labored while many of us slept in peace, they have spent their own money and traveled many thousands of miles to protect the interests of whom—even the humblest man engaged in the handling of trees. It has made no difference whether one has been faithful in meeting the financial obligations of the Association or not, he has received through the efforts of our Association workers benefits great beyond computation. Whether he be retailer or wholesaler, whether he be dealer or agent, if he deals in trees and plants his business is worth more to-day because of the eternal vigilance of our Association officers.

Is there any considerable difference among us any way, my friends, whether one ships his stock in ear load or by local freight and express? Are not our interests in a very large degree at least mutual? Can we afford to view with equanimity an effort to divide our forces when every thinking man must realize the hazard of such a division? Let us as retailers and wholesalers get away from our own little affairs and, shoulder to shoulder, work together for the upbuilding of the nursery interests of America. Let us quit talking about "big fellows versus little fellows," for none of us are big unless our perspective of life is true, unless we can lose sight of selfish interests in service to our fellows, and none of us are little except that we be selfish.

On a former occasion I declared myself against further organization, and am of the same opinion to-day because I think the ground is entirely covered and the interests of all are protected within our present organizations. As one interested principally in the sale of stock through retail endeavor, I feel that I have at all times received a square deal and am entirely satisfied that there is no present need of any member of the fraternity but that can be met satisfactorily through our present organizations.

WHAT DIVISION WOULD MEAN FROM A FINANCIAL POINT OF VIEW AND OTHERWISE

During a period of more than forty years, the combined efforts of the nurserymen of America have resulted in gathering together a membership of between four and five hundred. Every possible effort has been made to interest every worthy man engaged in the nursery business or in closely allied trades. The great need of our officers through all the past has been money, and much more would have been accomplished had it not been for this handicap. At the Detroit meeting in June of 1915 I had the honor of presenting a plan for the reorganization of the Association which provided a better financial system than we had had in the past, and the plan was adopted by practically an unanimous vote of the members present. It is believed by the Executive Committee that when this plan is in thorough working order it will provide approximately \$10,000.00 annually, an amount sufficient to meet creditably the needs of our officers. No plan for raising funds could be fairer than that provided by our new constitution, where every member's assessment is based upon his earnings.

We are just beginning to get the machinery of this new

organization to working smoothly, when along comes the suggestion that the majority of the members secede and form an organization of those who are interested especially in the retail end of the business. What effect all this would have on the affairs of the Association is, to be sure, a matter of conjecture. The way the question presents itself to my mind is that there is room in the American Association of Nurserymen for every worthy nurseryman in America, but there is no room in America for another association, retail or otherwise. Furthermore, while the present Association would suffer should any considerable number of its members set up shop for themselves, the only thing to be gained would be an empty name. A very large part of the funds provided for the running expenses of the Association come from men who are true to the principle, in union there is strength, and who, I believe, will not be easily persuaded to turn their backs upon the Association that has succored them through all these years. The natural result would be an Association without adequate funds to accomplish anything worth while.

FURTHER REFORMS IN THE NATIONAL ASSOCIATION ENTIRELY IN ORDER

Once before I have referred to certain resolutions which were before the Milwaukee convention and which are, in some measure at least, the basis for the agitation of a retail association. I have no criticism for the purposes of this resolution, in fact I am in heartiest accord with the principles enunciated, that wholesale trade lists should go only to bona fide nurserymen. I am not in accord with the methods proposed for gathering the information as to who are entitled to trade lists, but this is a different question. What I started out to say was that I am in hearty sympathy with this reform which is not new, but which has occupied a place on every program both state, district, and national for the past twenty-five years, and I am definitely sure that 90 per cent. of our wholesale friends would not knowingly send wholesale lists to any person not entitled to them. Is it not probable that such irregularities can be corrected within the Association as it at present exists? The wholesale nurseryman would not run through one season without his best customer, the retailer, and I take it that whatever policies pursued by the few and which work a hardship or loss on the retailer will be heartily condemned by one and all alike.

Whatever is necessary to make our present organization more useful in serving the interests of all, that let us do, but let that be done in union. The present is perhaps the most critical period in the whole life of the nursery business. Beset on all sides by unfair legislation, each state vying with every other state in the enactment of laws which are proving an onerous burden, entails a fight for our very existence. Many of our leading nurserymen are giving up the fight because of pecuniary losses and are turning their attention to other lines of business, and many more of us would follow their example, perhaps, if we knew how to effect the change without ruin.

In such a time it behooves us to stand squarely behind our chosen officers, furnishing them the sinews of war and urging them on to victory. I am not in sympathy

with further organization, but I am in sympathy with the thought that we should all labor together to the end that membership in the American Association of Nurserymen may represent all that is true and best in a noble and upright profession.

THE PROPOSED QUARANTINE ON NURSERY STOCK

By C. J. W. Ottolander.

Referring to the resolutions adopted at the recent meeting of State Foresters and Inspectors in Washington, D. C., and the view held by various Federal Government Officials, I think the stand taken by these gentlemen in this matter is altogether too drastic.

If a disease breaks out among people, we try to stamp it out by means of preventing its spread, not by prohibiting immigration. If disease is prevalent in a certain part of the country, this particular section is quarantined until the disease has been controlled.

This is the way we have been treating the plant disease question and with good results, why should we depart from this now where our Government has the power to restrict and forbid the importation of any plant known to be infected?

The absolute quarantine will work a terrible hardship on the growers from other countries and be disastrous to business enterprise in this country. If it could be conclusively shown that it would prevent the spread of pests and diseases it would have to be done, but no one can prove this to be an absolute certainty, because there are so many other carrying agencies besides plants and we would have to build a Chinese wall around the country with mosquito netting over the top of it.

Several countries have established organizations to combat these evils and notably Holland has been a pioneer in this kind of work. For twenty years there has been established in that country a Phytapatological Service equaled by no other country in its efficient service, the most rigid inspectors in this country must admit that all nursery stock coming from Holland is practically free from pest or disease so effective have been the measures instituted, that France and Belgium shortly before the war broke out delegated several of their inspectors to see how it was done.

Professor Ritzema Boss has been at the head of this Government Bureau, ever since its establishment. With a competent staff of assistants, appointed by the Government, after passing careful examination, stationed at the various growing centres, men who make this work a life study, they control the situation, with wonderful results.

Not only is every nursery inspected through the summer, but all plants are again inspected before being packed, when ready to be placed in the boxes at the packing houses at the place of origin and not until they are found to be absolutely clean a permit is issued allowing the owner to go ahead with the packing and shipment.

All infested stock is rejected and ordered to be destroyed at once, which is done.

The large nurseries have all their own disinfecting

materials and appliances to work with, done by competent men.

The smaller growers are assisted by an organization established by the Pomological Society of Boskoop for this purpose, this organization supplying the disinfection service at a nominal cost per acre and no grower can afford to do without it so low is the cost and effective the work.

Again in every season of the year bulletins are issued warning growers of the approaching breeding seasons and telling them how to exterminate the evils.

It can readily be seen that such a complete service makes it practically impossible for any pest or disease to enter the U. S. A. from Holland and the proposed restrictions would result in a material loss to our nurserymen as well as the consumer.

NEW EXPERIMENTAL ORCHARDS AT STATE COLLEGE, PENNSYLVANIA

A sixty-acre fruit farm, with the complete equipment of a commercial orchard is planned for the department of horticulture at the Pennsylvania State College. The new orchard, supplementing the present experimental tracts, is to be established to enable students in the various horticultural courses to obtain practical instruction in modern methods of fruit growing.

According to the plans of Dr. S. W. Fletcher, head of the horticultural department, the State College orchard will be planted to apple, peach, pear, plum, and other tree fruits. Small fruits, strawberries, raspberries and grapes will also be planted. A large packing house is to be part of the equipment.

A NURSERYMAN ELECTED PRESIDENT OF THE COUNTRY BANKERS ASSOCIATION OF GEORGIA

C. T. Smith, of Concord, Ga., president of Smith Bros. Nursery Co., and also president of the Concord Banking Co., was elected president of the Country Bankers Association of Georgia at their recent meeting in Atlanta. This association represents the interests of 680 National and State Banks located in the smaller cities and towns of the state and with resources amounting to nearly \$200,000,000. Mr. Smith's election to this high office is a fine tribute to his business standing amongst the best men of his state.

THE CASABANANA

Sicana Odorifera

S. L. Watkins, Pleasant Valley, California.

The strangest and one of the most valuable new fruits of the present day. The Casabanana belongs to the melon family. It will climb to the tops of trees 40 to 60 feet in one season. The fruits are about 18 inches in length of a lustrous fiery red color, and possessed of a strong pine apple flavor. For making preserves they are unrivalled. A large tree loaded with three or four hundred fruits of the casabanana is a sight never to be forgotten. The seeds should be started early in pots and after all danger of frost is over transplanted to the open ground.

PRESIDENT'S ADDRESS

*By Lloyd Stark, Western Nurserymen's Association January
24th, 1917, Kansas City, Mo.*

FELLOW members of the Western Association of Nurserymen: To have been selected by you to act as your President is a great honor, but to have gained your friendship and confidence in sufficient degree to cause you to place me in this position of responsibility and trust is a far greater privilege.

The history of the Western Association is one of action—it is, and has always been, a working business organization. It has been the source from which has flowed much to improve and upbuild the entire nursery profession, not only in the West but throughout all America.

I am proud to be a member of this body of men. I am proud of the record of the Western Association and I feel that the future will serve to increase that already splendid record of achievement.

In the nursery world, as in all other lines of endeavor, times have changed—old boundary lines of East and West, North and South have largely been effaced. Our nursery activities are necessarily becoming broader and less localized, and with this broader activity has come a broader vision, a more sympathetic interest in the general welfare of all those engaged in the nursery profession, all of which makes possible the opening of the door to a stronger, closer co-operation, a co-operation not only between the various sectional and national associations, but between the individual members as well. This co-operation, in our every business activity, we must preserve and foster against every opposing influence.

We have heard much of co-operation in recent years, but we have practiced too little that which we have preached. Seriously, gentlemen, the time is at hand when we must co-operate or perish. It is, without a shadow of a doubt a question of "United We Stand, Divided We Fall."

Consistent co-operation, gentlemen, is the foundation rock on which rests the giant structure of all modern activity, both commercial and military. Let every member of this organization remember the word "co-operation"—let us make it our slogan and watchword, for the time is at hand when we must present a solid front against all the various influences which may tend to disrupt and cripple the nursery business.

Since we last met here, one year ago, mighty economic changes have taken place throughout America, and throughout the world. Many of these changes, of course, are directly traceable to or are the effects of the European war. The giant strides of the United States never could have been accomplished, but for the splendid co-operation of all our varied national interests. As a result, the United States stands today the wealthiest nation on earth, and temporarily, at least, New York has become the money center of the world.

The American dollar has become a more important

medium of international exchange than the English pound Sterling. All previous world's records of all nations for exports have been broken. The resources of our national banks exceed by a billion dollars the combined resources of England, France, Russia, Italy, Spain, Holland, Denmark, Germany, Switzerland and Japan. This phenomenal record, while largely due to the war, was made possible in a secondary sense at least by the close co-operation of all the financial and industrial resources of the United States, not excepting the Federal Government, itself. But for consistent co-operation these staggering records could not have been made.

The prosperity of the railroads, so intimately connected with our national prosperity and welfare has eclipsed all banner years by over 30 per cent. but even this record would have been vastly greater had the railroads practiced a little closer co-operation with their allied forces and industries, for the efficiency of the railroads has been, as you all know, on the verge of a break down due largely to congestion of a freight traffic too great for their facilities. In the case of the railroads it is a case of lack of preparedness—a case of paying too much attention to the cries of stockholders for dividends and too little spent on up-keep and new rolling stock.

The freight situation as regards the nurserymen is much more encouraging than it was sometime ago, tho' it is still precarious, as so many things can happen. However, we believe by the time our spring shipments are ready to go out the railroads will be in position to handle them satisfactorily.

At a recent meeting of growers in New York the writer read to that body a letter from the office of the President's Conference of the Eastern Railroads, addressed to Mr. Curtis Nye Smith, the Counsel of the American Association, wherein it was stated that Mr. Smith's representations on behalf of the nurserymen calling attention to the absolute necessity of handling shipments on time, removal of embargoes, etc., had been placed before the President's Conference and the tone of the letter indicated that it would receive favorable attention and that the embargoes would be removed. A copy of this letter was forwarded to the office of the President's Conference for the Western Railroads (West of the Mississippi) and there is every reason to believe that it will receive their favorable consideration. Briefly, it does not now appear that we will be face to face with a freight embargo this spring.

INTERNAL TRADE MATTERS: The subject, which a large volume of correspondence with the different members of the Association indicates to be uppermost in the minds of not only the retail but the wholesale nurserymen, is the standardizing of our basic sales methods so that there will not be the wholesale competition that a number of

retail nurserymen have, no doubt, justly complained about in recent years. Wholesale nurserymen with whom I have corresponded are just as anxious to have this matter cleared up as are the retailers, because all realize it is a common cause. I believe a committee should be appointed whose duty it would be, at least to roughly define trade prices, wholesale prices and retail prices. The Association may find it desirable to have a committee definitely define just what is the meaning of "trade price list"—"wholesale prices"—"retail prices."

A great deal of trouble and misunderstanding, as well as the cut-throat competition and cut-throat prices seems to be due to the misconception in many quarters as to just what a wholesale price list is, and what a trade price list is, and what persons are entitled to each. This matter will be discussed later on in our program, and it is one of the most important subjects to come before the Association.

PRICES: There has been even more agitation on the subject of prices this year than heretofore. Increased prices are absolutely imperative, and considering the cost of labor, raw materials, and the increase in all overhead expenses I feel that every man of this and every other nurserymen's association is convinced that prices must be materially increased.

TARIFF: The desire for increased tariff by a number of nurserymen will, perhaps, be somewhat affected by the recent decision of the Holland Nurserymen's Organization to prohibit any member of that Association from shipping nursery stock to the United States for auction. This, of course, will not affect members outside of their Association, but it will, no doubt, greatly relieve the situation. If the members desire any tariff action the matter should receive attention so the Tariff Committee may understand the desires of the Association.

PROPAGATING STOCK: In order to prepare for the future, the members of this Association, as well as the American Association, and the individual nurserymen of this country should, as far as they can, endeavor to foster the production of our raw materials in this country. It is simply a question of "safety first." In spite of everything we can do, it may be that we will find it absolutely necessary to depend on this country for all of our propagating stock. Of course, the difficulty is that even should an absolute prohibition against all importations be put into force by Congress and the seedling industry thus forced into existence, Congress would also have the power and might at any time repeal that law and again allow the importation of stock. This, of course, would practically wipe out any investments made in these plantations.

MEMBERSHIP: It has been suggested, and I believe the time will come in the near future when this Association will find it desirable to promulgate certain regulations and requirements before nurserymen become members, and that they be lived up to in order to retain membership in this Association. We have all come in contact with many classes of business men and in spite of all they say about the tree salesman and the nurseryman I am convinced that there are no more black sheep among us than in any other business—perhaps not so many—and while we are on this subject I think this Association and every

other nurseryman's association should vigorously remonstrate, through their proper officials, when any unfair statements, striking at the basic honesty or integrity of the nursery profession, are brought to light.

For instance, I understand that the following statement appeared in a paper which is supposed to be fair and square and whose aim is to insure fair dealings to all its readers. This well-known paper in brief makes the following statement: "Misrepresentation seems to be the principle stock in trade of nursery agents. If they told the truth few would sign orders, etc." This same paper warns its readers to avoid tree agents and seed agents, telling ridiculous stories, etc. There undoubtedly are unscrupulous tree agents, dishonest tree agents, and tree agents who tell ridiculous stories, but they are in the vast minority, and the nurserymen of today are just as anxious to have honest salesmen and agents as this same paper is to have fair, honest statements in its columns. It is obviously unfair to the nursery profession to pick out one flaw and use it to paint the whole profession black. It would be just as unfair for the nurserymen to spread throughout the land to the farmers that they should avoid reading farm papers because some editors of farm papers are crooks and because the crooked editor of a leading farm paper down in Indiana was sent to the penitentiary the other day because of some fraudulent subscription scheme.

It reminds me of a story a friend told me the other day—supposed to be a true story.—One of his salesmen went in to call on a banker in a large town. The banker threw up his hands in horror and said he would have nothing to do with a tree agent, that they were all a bunch of scamps, and ought to be in the Penitentiary. The salesman in question happened to be a clever chap and he came back at the banker straight from the shoulder. Said he "I'll bet you \$25.00 that I can go over here to the penitentiary (there was a penitentiary in the town) show you twelve bankers in the penitentiary for every tree man you show me;" the banker laughed and realizing the absurdity of his antagonism to tree agents in general (perhaps on account of reading such assertions as mentioned above) turned around and bought an order—a good sized one—from the Agent.

Some nurserymen, of course, do not believe in selling through agents; some do not believe in selling through catalogs. No matter what sales method we believe in, any mud thrown at one branch of the nursery profession is bound to stain any one even distantly connected with that profession. We must not only endeavor to raise the morale of the nursery profession (and we must do that), but we must make the public know and believe that we are doing it, and that they can confidently do business with us no matter whether they do business through our representatives, our catalogs, or what not. And we should severely censure any attempt by any one in or out of the nursery trade, who makes statements or insinuations that strike at the basic honesty of the profession.

HANDLING: Another subject that seems to warrant more attention from the nurserymen is the handling of nursery stock from the time it is ready to dig until it is placed in the hands of the planter. Briefly, it seems apparent that a great many nurserymen are too careless

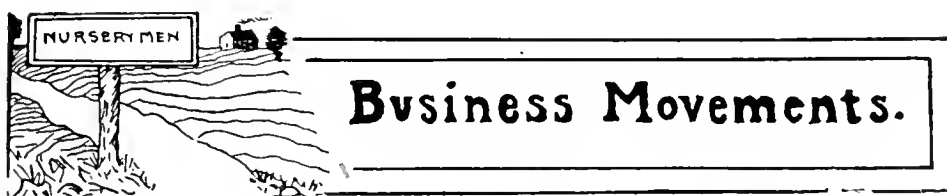
about exposure and about their packing. There seems to be some room for improvement here.

ADVISORY BOARD: At the request of President John Watson of the American Association of Nurserymen, Mr. Stannard was selected to represent the Western Association on the Advisory Board which is to meet in joint session with the Executive Committee of the National Association at the next annual meeting of that Association. The idea of this Advisory Board is to bring into joint council, representatives from every sectional organization. It is an earnest effort to combine and unify the interests of American nurserymen, and it is bound to have a stabilizing effect if given half an opportunity; in fact it is already having a most beneficent effect on the attitude of the members of the nurserymen's associations everywhere toward their sister organizations.

As the old darkey preacher said "The Wold Do Move"—There have been a great many discussions in the last few years, but we are coming along, and honestly, gentlemen, I think we are moving rapidly—it seems to me there has been a vast amount of improvement both in nursery efficiency and ideals.

The splendid program provided by our Committee is concrete evidence of this fact.

The outlook for spring is, I believe, decidedly better than it has been for many years. The big surpluses that we have all been staring in the face for so long have become depleted. The demand is better in every branch of the nursery industry, and if we will be guided just a little bit by the past and not repeat those errors of over-production I feel sure the immediate future is full of hope for the nurseryman. What will happen after the war no one can predict, but there is no reason to feel anything but optimism, for ours is a profession that is supplying a growing demand—as our nation grows wealthier, as it builds up, more trees and more ornamentals are bound to be planted, and we may expect a bigger, better, broader business. I thank you.



CHANGE OF BUSINESS NAME

Instead of W. N. Scarff, New Carlisle, Ohio, it is now W. N. Scarff & Sons. Mr. Max M. Scarff and Mr. Howard Scarff now being junior members of the firm. Hereafter, all business of the nurseries will be transacted under this name.

A. T. De La Mare Printing and Publishing Company, 438 West 37th street, New York, are sending out the Gardeners' and Florists' Annual for 1917. Edited by J. Harrison Dick. Price 50 cents.

It is a year book for Florists, Seedsmen, Nurserymen and Gardeners and is brim full of up-to-date useful information.

THE TRIALS OF A SECRETARY

We have repeatedly called attention to the lack of interest in the American Association of Nurserymen, by many members of the trade. This seems to exist not only in this country, but also in England, where the trade is represented by the Horticultural Trade Association.

In the February number of the National Nurseryman we took occasion to point out the value of the work the Association is doing, and it is to be hoped that the members of the trade will speedily respond.

An article by the Secretary of the Horticultural Trade Association, printed recently in the Horticultural Advertiser, England, so nearly fits the conditions existing in the United States that we reprint it in part, in the hope that it will awaken some of our nurserymen to their duty to the American Association of Nurserymen, and induce them to become members.

It makes a wonderful difference to the view, what point you stand at to look at it, and the same holds good of affairs generally. I think it would do good if we all compared notes more often on matters of mutual interest, and so I ask the indulgence of the members of our Trade Association for one or two remarks from the *Secretarial* point of view.

Firstly, it seems to me that too many members expect the Council and Secretary to run the whole show, without their ever putting a finger in the pie, not to say putting their shoulder to the wheels. Of course, the bulk of the work must fall on the officials, but the "live" member will do his best to increase the membership, will promptly advise the Council of any evil or grievance requiring attention, instances of unfair trading, legislative dangers, etc., etc., and generally back them up and keep them in touch with current events in his district.

As a matter of fact, a large proportion of our members give no sign of life, excepting once a year when they pay their subscription. Certainly a few have worked splendidly at increasing the membership, and if all had followed suit we should have had a roll of two thousand by this.

It seems to one whose work is a good deal at the desk, not too much to ask members to respond promptly to official communications, but the bald fact is that only about ten per cent. of our members respond quickly, another twenty or thirty per cent. answer when stirred up, but a very large proportion never reply at all. Only on one occasion in my 16 years of office, have I had replies from more than half the members to an official communication. If our Association is to exercise the power and influence which it ought to do, the members should do *their* share and respond quickly to demands made upon them for information, etc. ****

As to this matter of subscription, which, by the way, is small, compared with most other organizations, it is a little rough on the Secretary to have to make half a dozen applications for it. The bulk of the members pay up pretty promptly, but about fifty require four notices, and of these, some thirty wait until the last moment, when it is a question of being struck off the roll before stumping up. ***

This is rather plain talk, but if the cap fits any member uncomfortably, let him take it to heart. **

CHAS. E. PEARSON, Sec'y.

Jamaica, N. Y., February 7, 1917.

National Nurseryman,
Hatboro, Pa.

Dear Sirs:—

Enclosed find my check for \$1.50. Kindly renew my subscription for another year.

Wishing your valuable paper all success, I am

Yours very truly,

A. L. MILLER.

Re Quarantine on Plants, Etc.

A statement by the Chairman, Legislative Committee of the Society of American Florists and Ornamental Horticulturists

PRIOR to the passage of the "Plant Quarantine Law" of 1912, agitation was worked up by lectures, magazine articles, pamphlets, etc., with the evident object of creating an atmosphere favorable to its passage. The impression was given that about all of the insect pests and plant diseases that affect our forests and farm crops were imported into the United States by selfish nurserymen and florists—along with the plants and nursery stock which they imported from Europe. This propaganda resulted in the passage of the Plant Quarantine act in 1912, though the agitation still continues.

To operate the "Plant Quarantine Act" the Federal Horticultural Board was created with headquarters in Washington, D. C.; it consists of five Bureau chiefs of the Department of Agriculture, with Dr. C. L. Marlatt as chairman. All of these men are well qualified for their duties and though the law gives them almost autocratic powers, power to quarantine any foreign country or locality, they have used this power with commendable discretion and moderation. But this does not satisfy a group of State Entomologists who demand nothing less than an absolute quarantine against the importation of plant life from all foreign sources.

At a meeting of Entomologists about a year ago, resolutions were passed which in effect requested the Federal Horticultural Board to put this absolute quarantine into effect, but as no action was taken, the Entomologists interested the American Forestry Association in its plans (this association consists largely of Foresters, Entomologists, Lumber men and others interested in our forests). Naturally such men know little about the commercial side of the Nursery or Florist business, but when they were informed (by men who should know better) that an absolute quarantine of all imported plant life was necessary for the protection of our forests and farm crops, they took up the subject with enthusiasm and called a special conference in Washington, D. C., to adopt measures to stop importation—even of the raw materials.

The conference was held on January 19th, myself as chairman of the Legislative Committee of the S. A. F. and O. H. and J. McHutchinson, of New York, a member of my committee being present on behalf of the S. A. F. The Legislative Committee of the American Association of Nurserymen was also there, besides several individual members of the Nurserymen and Florists organizations. Many speeches and papers were delivered advocating an absolute quarantine, but no opportunity was given for discussion after each paper, so the horticultural side of the question was not voiced. Resolutions were unanimously adopted favoring an absolute quarantine, and to show what it means to the florists and nurserymen, I quote from the proposed Bill the first two sections as follows:

Sec. 1. That it shall be unlawful for any person to import or offer for entry into the United States any

nursery stock. *Provided.* That the Secretary of Agriculture may import, grow and propagate nursery stock in small quantities for experimental and scientific purposes, upon such conditions and under such regulations as he may advise.

Sec. 2. That for the purpose of this Act the term "nursery stock" shall include all field-grown florists' stock, trees, shrubs, vines, cuttings, grafts, scions, buds, bedding plants, all herbaceous plants, bulbs, roots, and other plants and plant products for propagation, except field, vegetable, flowers, and tree seeds.

This bill, if passed, will shut out practically everything the florists now import, Azalea Indica, Bay trees and Araucarias, Valley pips for forcing or any other purpose, Jap. lily bulbs, French bulbs, Dutch bulbs, Manetti stocks used for greenhouse grafting of roses, Orchids and nursery stock of every kind. It would not only shut out Draeaens plants, but the canes which are necessary to produce them. It would shut out Kentia plants—also the seeds necessary to grow our own plants. "What for?" you ask; the answer is "To save our forests." If any member of the S. A. F. thinks it necessary to stop the importation of Valley Pips, Manetti stocks, or Jap lily bulbs to protect our forests, I would like to hear him.

Arrangements were made in the Conference Committee so that the measure would not be introduced in Congress until Committees from the National Association of Florists and Nurserymen had an opportunity of conferencing with a special committee of the American Forestry Association appointed for that purpose. This arrangement shows the right spirit, and while the special committee consists mostly of State Inspectors we hope to be able to show them that while their plan, if put into operation, would put back the Florist business many years, it would not go far in protecting our forests or farm crops or reduce the diseases which afflict them to any appreciable degree.

The measures that have threatened our interests for several years have now reached a crisis. We will need on our Committee men of ability who are willing to subordinate their personal interests to the welfare of the trade—men who understand why stock is imported, why at least the raw materials are necessary to our welfare—men who know something about insect pests and plant diseases and who can adequately express their views.

Since our policy will likely have to be defined before our annual convention in August (The Nurserymen's Convention being held in June), I will seek the advice of the Executive Committee of the S. A. F. on the subject, but as the matter is such a vital one to many of our members, I deem it wise to inform the general trade through the medium of your columns and trust you will give this report the publicity you consider it deserves.

A NOTABLE SPEECH

The death of Mr. Stanley Watson, will recall to the many nurserymen who attended the convention held at West Baden Springs, Indiana, June 1905, the very captivating speech which he made at that time.

The names of several cities had been mentioned as the convention city for 1906 when Mr. Watson took the floor and extended an invitation to the Association to hold its meeting in Dallas, Texas.

There was little doubt but that few nurserymen present would vote to take the Convention so far south-west, but after hearing Mr. Watson, the meeting was swept off its feet, and a ballot being immediately taken, it was unanimously decided to accept the invitation. It was generally conceded that not another man at the meeting could have accomplished this feat.

Its effectiveness was not in just what he said, or the words he used, it was the smooth appealing tone of his voice, coupled with that southern drawl and accent that touched the hearts of the members.

MR. WATSON'S SPEECH

We are all of us bowed down by a load of gratitude to the State of Indiana for the magnificent entertainment it has afforded us here, we appreciate what the people of Indiana have done for us. Don't you ever propose to give the people of the South-West a chance to even up this debt that you have been piling upon them the last thirty years? Don't you ever propose to extend that opportunity to the millions of this American Union beyond the Mississippi? According to this Association the United States is bounded on the west by the Mississippi River, and I am here to call your attention to the fact that beyond that river lies an empire, an empire that will welcome you with open arms.

There has been something said about Dallas being hot, and there has been something said about Dallas being a long way off. We will confess that we have not got the North Pole in Dallas County, Texas, but the idea that the desert of Sahara lies in Texas is all a mistake, and while it may be a little warmer than it is at the North Pole, I do not think that you need to worry about suffering from the heat in Texas. Texas in June is one of the most pleasant places on the earth. If you come down there, we will show you the time of your life. As a matter of fact, just before I left home we put a whole lot of old hens into training and when you get down there you will find that spring chickens are just ripe.

There has been something said about the eastern Nurseryman not going so far and that we will lose all these great men from the State of New York, that they won't go to Texas. But, my friends, no matter where you hold this Convention, remember that little line from Holy Writ which says, "Where you find the worm is, there will you find the hen also," and these big men are hunting for these small nurserymen, and they will go to the Convention if you go to Honolulu. Notice that my friends, they are deeply interested in you, it is the small nurserymen upon whom they grow rich, they are interested in you just the same as the interest which is illustrated by this little story:—One warm afternoon—that is away down the south of Texas where it is warm—I will call your attention to that—a gentleman was walking along the banks of one of our beautiful crystal streams and two little nigger boys were fishing on the bank of the stream, and the little nigger boys you know get sort of sleepy in the afternoon. One of them dozed off and he slipped down into the water, "ker-chunk," the other one looked around, saw him in the water, dived in after him, pulled him out, laid him on the bank and this gentleman went up to him, patted him on the back and said, "Brave boy, that was a gallant deed, what is he, your brother?" "No," he said, "that nigger ain't my brother." "Why," the gentleman said, "was he your friend?" "No, sir, not any particular friend of mine." "Well, don't you love him?" "Of course I don't love that nigger chap." "Then why did you risk your life for his?" "Because that nigger had the bait in his pocket." (Laughter) Just so long as my friend the small nurseryman of the west and southwest carries the bait in his pocket, you can

depend on it that the big fellows are going to come. Besides that, have you ever figured on the particular variety of watermelon you get in Texas in June? Don't you know that if you come down there we will stuff you so full of watermelon that you won't lick dust?

Now, about this place where we have had so delightful a time, I am informed, and I have taken the gentlemen's word for it, I am informed that a certain liquid known as "Water" there are thirteen varieties. Now, I say, we cannot offer you that many varieties of water in Texas, but I can assure you that if you come down there, you won't dry out.

Another proposition, of course it is mighty nice and convenient also to have this Association right where these big fellows can run up in a few hours, but what about these little fellows down south that can not go a long ways? What is this Association for, any how, if it is not to get bigger and stronger all the time? And don't you know, if you get down to the southwest, that you will get a large number of members that cannot go to Indianapolis? We have not got as much money as you eastern people down there, as a matter of fact, you have been loaning us money run up in a few hours, but what about these little fellows down to the Convention. Ain't you ever going to give us a chance to square?

Now, I want you all to vote for Dallas, vote for Dallas, because every man, woman and child in the State of Texas wants you to come and will welcome you with open arms.

THE PERUVIAN STRAWBERRY BUSH.

(*Physalis Peruviana*)

S. L. Watkins, Pleasant Valley, California.

A unique and beautiful fruit, that will succeed over a wide area of country. This fruit has been known and cultivated in Peru and Chili for over 200 years. At the Cape of Good Hope, South Africa, it is widely grown and goes under the name of Cape Gooseberry. Also in the English settlements of New South Wales it is extensively cultivated and well known, and is the chief fruit at present that the colonists possess there, and is eaten raw, or made into pies, puddings, preserves, etc. In Peru and Chili it is also grown in commercial quantities.

It is a hard woody shrub, bearing a great profusion of golden yellow berries, highly fragrant and having a refreshing strawberry like flavor. It is used in Peru and Chili the same way as we use strawberries, and for every purpose that a strawberry is put to.

The Peruvian strawberry bush is highly recommended as an ornamental plant of great merit. It can be grown successfully over a very wide area of the Pacific Coast, and in localities where it is frozen down by severe winters it will spring up in the early part of spring and make a luxuriant growth and give a large crop of fruit. It is a perennial and will grow for many years when once well established. I am of the opinion that with some protection of the roots this plant can be successfully grown in all of the colder portions of the United States. The young plants should be set about 5 feet apart in the rows and the rows made about six feet apart.

There is no question but that when better known the fruit of the Peruvian strawberry bush can be marketed to great advantage in all American cities and towns. The general yield is about 15,000 quarts per acre with fair cultivation.

The National Nurseryman

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Editor ERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., March 1917

THE PROPOSED QUARANTINE

In analyzing the effect on the different sections of our business should the proposed quarantine become a law, it is necessary to consider the different sections separately.

A nurseryman who makes a business of growing seedling fruit stocks would necessarily benefit by a quarantine, as it would force the grower to buy domestic stocks. The same may be said of those who grow largely forestry and shade trees. The nurserymen who grow fruit trees will be affected only in so far as it affects the supply of the right kind of stocks.

The grower of ornamentals will be seriously affected and the retailer most of all.

When we come to consider the florist growers, florist retailers, jobbers, dealers and importers, all of which are closely and vitally connected, the effect of the quarantine will be most serious.

While it is all right to consider these divisions of the Horticultural trades separately, it must be kept in mind they do not exist in actual fact, except in isolated cases, as one merged into the other. There are numerous concerns that handle many lines, and it will be found that the welfare of one is very closely tied up with that of the other, so that a blow given one will be felt by all.

Individual businesses may be indifferent to the effect of such a quarantine or perhaps even benefitted by it, but it would undoubtedly mean loss to the great majority, and we might say disaster to a goodly number. The failure of any particular business never did and never will benefit the others as credits are so interdependent.

Quarantine has not been proven necessary nor has it been proven that it would be effective.

It is the duty of everyone connected with the horticultural trades to do all in their power to prevent a mistake that would undoubtedly work an injustice to so many.

If a quarantine were necessary, if it would accomplish the advertised purpose, we could try and be altruistic enough to submerge our selfishness for the good of the country.

There are perhaps those who consistently believe that all the plants that are now imported could be grown in this country, (The National Nurseryman may be included among them) and a quarantine would be an effective way to bring it about. Whether this belief is true or not, a quarantine would be an unjust method. Let the growers prove their ability to grow what is now imported and then pass whatever measures are necessary to foster the trade. Just at present we do not want experimental laws, so materially affecting our business, passed to satisfy impractical theorists.

The following Editorial is from "Printer's Ink" of December 28th last and fits the nursery business so well we reprint in full.

COMPETITORS WHO ARE WORTH ENCOURAGING

"The business man of the old school, who believed that his competitor was an undesirable citizen who should be thwarted in every way possible, would be quite bewildered at some present-day developments. He might note, for example, that the Victor Talking-Machine Company has settled out of court a patent infringement suit against the rival manufacturer of the Sonora, by licensing the latter company to use the invention which was under dispute and to which the Victor Company's title was admitted to be clear. He might see the holder of the basic patent on a vacuum cleaner licensing its competitors to operate. He could see competing manufacturers, in many fields, exchanging data on markets and credits and processes, and even on costs. Negotiations which in his day were carried on in the sub-cellar, under lock and key, are to-day carried on publicly and in the light of day. Small wonder if the poor old gentleman should think that he had stumbled upon an age of altruism.

Altruism is hardly the name for it, though. Competition is as keen to-day as it ever was—perhaps keener; but its basis has been extended. Instead of a fight for the biggest share of an existing demand, it has largely become a contest for the widest possible extension of markets. The greater the number of people who can be induced to use a product, the greater the possibilities for every maker of it. An active and aggressive competitor, making a good product, is coming to be regarded as an asset. It is better to be the leader in a hotly contested field than to possess a monopoly and carry the whole burden of educating the public.

The competitor who should be shut out whenever possible is the maker of inferior goods which will hurt the reputation of all goods of the same kind. The manufacturer of a good product is making it progressively easier to sell goods of that kind, and is intensifying the habit of using them. If he is a consistent advertiser, so much the better, provided that his copy is devoted to proclaiming the merits of the product and the advantages of using it. The "me, too," advertiser, and the "knocking" advertiser are undesirable. But the concern which is doing its share of the general task of educating the consumer deserves encouragement, though it be a competitor. That is the new spirit which is making the business world of to-day so bewildering to the business men of yesterday.

It isn't sentiment, though it is undoubtedly pleasanter to sit down to lunch with your competitor than to cross the street with a scowl when you see him approaching. It isn't altruism, though unquestionably the information freely shared among rival members of manufacturers' associations has often been unselfishly given. It is simply good business to promote the welfare of an industry of which the individual concern is but a part."

DISEASE OF POPLARS SPREADS TO NEW YORK

Although New York was not included among the states where a serious fungus disease of poplars was reported by the federal authorities, the state college of Agriculture announces that the disease has been found on Long Island. This disease is similar in appearance to that which

destroys the chestnut trees and may be found on any species of poplars or cottonwoods.

Trees attacked by this fungus show cankers or depressed areas in the bark, these spread rapidly and often girdle the twig, limb, or trunk of the tree killing the part above the canker; the trees become ragged in appearance and finally die. This is especially true of the Lombardy poplars so often planted in rows along highways.

The fungus which causes this disease, according to the authorities, was imported from Europe and is especially severe on stored and transplanted nursery stock. The centers of infection appear to be, in every case, either certain nurseries known to contain diseased trees, or points where poplars from such nurseries have been planted.

Residents of New York who think their trees are affected by this disease, may receive exact information by sending samples to the department of plant pathology, New York State College of Agriculture, Ithaca, New York.

Bowie, Md., February 17, 1917.

Editor National Nurseryman,
Flourtown, Pennsylvania.

Dear Sir:—

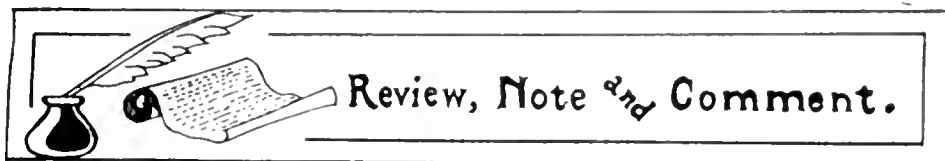
Since advertising in the National Nurseryman we have had so many calls for nut trees and the sales have been so good that we are now almost entirely sold out and for that reason we find it advisable to discontinue our advertising at present. Generally I do not believe it good policy to quit advertising even after one is sold out but we are moving our nursery operations from Indiana to Bowie, Maryland, and for that reason do not have very much of an idea how many trees we will have to put on the market next fall. If we were sure that we would have a good fall stock we would carry the ads. and try to get the inquirers to let us book their orders but I very much doubt whether it would be very good business policy to do that with the uncertainty of trees to fill the orders next fall.

We have been very much pleased and surprised at the result from advertising and also at the growing demand for nut trees throughout the country. It shows that the public are beginning to realize the advantage of setting nut trees for shade and ornamental purposes instead of the numerous worthless trees that have been so generally used heretofore.

Please send me bill for our advertising account if we owe you, and I shall take pleasure in mailing you a check in payment of same.

Very truly yours,

T. P. LITTLEPAGE.



This is news. Owing to the rapid increase of the business the St. Cloud Nursery Co., St. Cloud, Minnesota, built last summer one of the nicest Retail packing plants in the Northwest, and will be able to pack their stock so that it will reach their customers in the very best of condition.

ADDITIONAL APPOINTMENTS TO THE ADVISORY BOARD OF THE NATIONAL ASSOCIATION

William Flemer, Springfield, N. J., representing the New Jersey Nurserymen's Association.

Robert Bagby, New Haven, Missouri, representing the Missouri State Nurserymen's Association.

Edward Moon, William H. Moon Co., Morrisville, Pa., representing the Wholesale Growers Association.

The labor situation looks very much as if the nurseries would have to draw on their office forces to help out in the digging and packing and that the boss himself would have to take off his coat, and roll up his sleeves, even if he is not in the habit of doing so.

NATIONAL ROSE AND PEONY GARDENS

Department of Agriculture Assemblings Collections of the Flowers in Washington, D. C.—Contributions Requested.

Flower lovers are being asked by the Office of Horticultural Investigations of the U. S. Department of Agriculture to contribute to the test gardens at Arlington, Virginia, just across the Potomac from Washington, roses and peonies of varieties not now represented in the Government collections. It is the hope of the Department to assemble at the Arlington gardens as nearly complete collections of varieties of the two flowers as possible. These collections will be used for comparison and study of conditions under which they thrive best, and also as a basis for plant breeding work. At the present time approximately 700 varieties of roses and 400 varieties of peonies are growing in the Arlington gardens. These represent about one-half the varieties of each of the flowers believed to exist in the United States.

The Department of Agriculture is creating the test gardens in cooperation with the American Rose Society and the American Peony Society. The rose garden was begun in 1915. The peony collection was started last fall. The majority of the plants have been contributed by nurserymen and florists, though many have been given by amateurs. Express or postal charges are paid by the contributors. Plants should be sent during the dormant season, which lasts from fall to late April. Potted plants may be sent successfully as late as the last of May.

Persons who believe they have varieties of roses or peonies not represented in the Arlington gardens and who wish to contribute to the collections should first write to the Office of Horticultural investigations, Washington, D. C., offering specific varieties or requesting a list of the varieties desired.

Philadelphia

The Convention City of the American Association of Nurserymen.



The illustration above is that of Independence Hall, Philadelphia, which may truly be called the fountain head of our national freedom. Here reposes the sacred Liberty Bell. The historic old building, with its flanking structures, is situated on Chestnut street and extends from Fourth to Fifth street. Independence Square is directly in the rear. The Colonial Apartment, with its original furniture, and wherein the Declaration of Independence was signed, is to the left on entering; the Supreme Court Room is opposite. On the second floor is a large collection of old portraits. Independence Hall is open every day and because of its historical associations is visited by more persons than any other building in the city.

No city in the country is so rich in historical associations and buildings as Philadelphia. Here, in the quaint old Betsy Ross House the first American Flag was made. Here is located Carpenter's Hall, the meeting place of the First Continental Congress in 1774. These are but a few of the many historical buildings with which every man, woman, and child in the country should be familiar.

Aside from its historical traditions, Philadelphia is one of the greatest Convention cities in the Country. Visitors can spend a week here and not see half of the many points of interest that are well worth a visit. There is the United States Mint, Christ Church, Commercial Museum, Girard College, Fairmount Park, the Zoological Garden, fine big department stores, and many of the largest manufacturing industries of their kind in the world.

In the month of June, when the National Nurserymen hold their Convention here, the weather will be warm and all of the Parks and outdoor amusements will be in full swing. Within a few miles of Philadelphia are to be found historic Valley Forge, Atlantic City, which is aptly termed the playground of the World, and numerous points of interest along the Delaware river.

PLANT BREEDING

Extracts from an Address by Professor S. A. Beach, Horticulturist, Ames, Iowa, before the Minnesota State Horticultural Society.

THE NEED OF FRUIT BREEDING

James J. Hill some years ago put out a statement regarding the prospective development of this country and the significance of land ownership, in which he included an estimate as to the increase in population in continental United States. It is a statement which I have often thought of and often quoted. Mr. Hill was a brainy, clear-sighted man, and one who could see and appreciate things of fundamental importance. This statement regarding the prospective increase of population in continental United States was made some years ago. The fact that up to this date the prophecy has been fulfilled gives us all the more confidence in the reliability of this estimate for the future. The time set in this statement for the United States to pass the 100 million mark was 1915. We actually passed the 100 million mark in 1915. This estimate included the statement that by 1950 we should have 200 millions of people in the United States.

Inevitably along with this increase in population is to go a corresponding increase in land values. Land and hunger is to increase. As we have frequently said in discussing this matter, it is important that we do not forget that while there is a crop of babies every year, there is only one crop of land. The time has gone by when men can go out west and get good cheap land with which to compete with the farmers of this region. A generation or more ago the pioneers came in here to take up cheap land. Where do their sons go to get cheap land? They go into the arid or semi-arid regions to the westward or they go away off into the Canadian Northwest. But even in the Canadian Northwest they have to pay a much higher price for land than the Minnesota pioneers paid when they came into this state. The day of cheap land has gone by. In meeting these conditions which we are beginning to face and which our children must face, it is important that we provide for ourselves and put into the hands of our children the very best possible agricultural materials, so that we and they may be better able to succeed in the inevitable struggle which must be made with the rest of the world in order to maintain the type of civilization which we wish America to stand for.

And while we are making progress in farm management, in the development of farm machinery, in an understanding of the rotation of crops in a scientific way, in the use of fertilizers economically, we must also have, if we are to win this battle, the very best plant materials that scientific plant breeding can give us. We cannot afford to follow a hit or miss policy hoping to stumble upon the improved varieties of plants that are needed. On the contrary, we must go at it in the same scientific way in which Germany and the other countries have gone at the matter of preparing for this terrible conflict which is going on in Europe. We have another kind of conflict on. We must win. To win we must prepare for it by systematically planning to put into our hands and into the hands of our children the very best plant material with which to produce the crop of grain, fruit and

vegetables which are to maintain our agriculture and all of these other things which rest upon the foundation of our agriculture.

To be of Greatest Benefit to this Region the Work must be Done in this Region

One matter of importance, as I see it, and one reason why the work which you are doing is significant, is this: that the plant materials and particularly the fruit materials which you need to use here must be largely developed here; or if they are brought in from other regions they must be thoroughly tested here, for the purpose of showing to what extent they are adapted to this environment. Many varieties which are valuable and excellent in other countries or in other parts of this country cannot do well under our climatic conditions. Our best fruits in the future will be originated here.

Illustrating this point I wish to call your attention to the apple list for Minnesota and adjoining territory. I took the trouble just a few weeks ago to send out some circular letters of inquiry in the Mississippi Valley. I started out with the idea of including the territory from Lake Michigan to the Missouri River but I didn't get the responses from Wisconsin that I desired. However, the responses which I did get represent, I think, pretty well the territory from Dubuque, Iowa, up the River to Minneapolis and then westward to the Missouri River. I have taken a few representative nurserymen in that region and have asked them to give me a list of the kind of trees that they have been propagating for the past five years; which in a general way, I take it, means the kind that the people here are planting most. Possibly some of the kinds which show up now in small numbers may later develop to greater importance. Doubtless newer kinds have not yet come to their full recognition.

Imagine, if you can, the apple trees in this entire region which have been planted during the last five years combined into one orchard a thousand miles long. The reports from these nurserymen as to what they have been propagating indicate that in this thousand miles of apple orchard the varieties would stand about as follows:

220 miles Wealthy	35 miles Anisim
118 " Duchess of Oldenburg	26 " Yellow Transparent
117 " Northwestern Greening	22 " Longfield
93 " Patten Greening	21 " Iowa Beauty
69 " Hibernial	20 " Jewell Winter
40 " Okalena	19 " McIntosh
39 " Malinda	19 " Wolf River
142 " other varieties in smaller numbers.	

Examine the above list as to the origin of the varieties named. With practically but one exception they have either originated in the region extending from Lake Michigan westward to the Missouri River, or they are Russians.

First on the list is Wealthy which I believe to be a cross between some red Siberian crab apple and the Rambo. Look at its basin and note the resemblance in color markings and in form to the Rambo. I suggest that Mr. Elmer Reeves, who is here, be asked to make a statement of what he knows about the real origin of the Wealthy that you may place in on record in the report of this Society as a correction of the old statement that it was grown from seed brought from Maine.

At any rate whatever its parentage the Wealthy orig-

inated from seed grown by Peter Gideon at his home in Excelsior, near Minneapolis.

Northwestern Greening, the next on the list, originated in Waupaca County, Wisconsin.

Patten Greening, the next, is from Duchess of Oldenburg and planted at Charles City, Iowa, by Mr. C. G. Patten, who, I am glad to see here with us today.

Hibernial is a Russian.

Okabena, originated here in Minnesota from seed of Duchess of Oldenburg.

Malinda was brought as a little seedling tree from Northern Vermont to Minnesota where it was first introduced into cultivation.

Anisin is a Russian as also are the next two on the list Yellow Transparent and Longfield.

Iowa Beauty originated with Mr. C. G. Patten in Northern Iowa from the Golden Russett.

Jewell Winter originated in north-central Iowa, McIntosh originated in Canada. Wolf River should be classed be classed with the Russians. It originated in classed with the Russians. It originated in Wisconsin. Evidently it is a seedling of the Russian apple Alexander.

Out of this list of 14 best apples for this region, five were imported from Russia and the others, excepting McIntosh, were developed here and most of them have the blood of Siberian crabs or Russian apples, if apples can be said to have blood lines of descent.

The point I am trying to make is that of all the varieties which we now have those which are best for Minnesota are kinds which either have been introduced from Russia or which have been developed here and the best of them have been developed here.

We must do right here the fruit breeding work which is to benefit us. We must develop our improved varieties here, out of the plant materials already here and any others which we can gather through the help of Professor Hansen and such other explorers from any part of the earth where good and useful plant material may be found. It is on this improved material that we are to build our most successful horticulture in the future. How is this done?

METHODS OF IMPROVING PLANTS

The lines along which plant breeding can be developed are indicated by the methods used in propagating plants. We know that propagation of plants is either by sexual or by asexual methods. Take the apple for illustration. We have propagation from seed. This may represent either one or two parent varieties. Then there is propagation by means of budding or grafting which signifies the perpetuation of that particular variety by division into separate parts; it is simply a continuation of the original individual from which the buds or cions were taken. And so, although apple varieties do not come true from seed, we may multiply the trees of any variety indefinitely by propagating its buds or cions.

Again we have the development of new types from seed as the result of hybridizing, i. e. crossing the parents to produce the seed.

Very seldom do we have, but we may have, the origination of new varieties asexually as graft hybrids. In other words, there is such a thing as a graft hybrid,

although just what its nature is botanists have not decided.

Finally we may have a new variety originating as a sport. For example, I have in mind a Concord grape vine on one side of which came out a branch which bore fruit almost twice as big as the ordinary Concord, a giant Concord so to speak. When the giant Concord clusters were self-fertilized and the seed propagated it gave us a distinct line of seedlings as compared with the seedlings grown from the normal type of Concord produced by the other side of the same vine. Here was a new variety that originated as a bud sport. It came originally from a bud on one side of that Concord vine which grew into the cane that bore the giant Concord fruit. Something had so fundamentally changed the nature of that original bud as to affect not only it, and the cane which grew from it but also the seed which the giant Concord produced.

Not only may we have the development of new varieties as bud sports: they may come also as seed sports. For example, we may get a smooth skinned peach, which we call the neectarine, originating from the pit of a peach. This is a case of a sport originating from the seed.

Finally we may have new varieties originating as selected strains, either from seed selection or bud selection. By a long process of gradual selection and change a new variety may be developed in this way.

Obituary.

STANLEY H. WATSON

There are many nurserymen who will regret to hear of the death of Stanley H. Watson, Oklahoma City, Oklahoma, on the 12th instant, aged 41 years.

Mr. Watson has not been connected with the nursery



The Late Stanley Watson

business for the past fifteen years, but he will be remembered by those who attended the West Baden Conven-

tion for the very clever speech he made which took the succeeding convention to Dallas, Texas, and for the address of welcome he made at that place.

Mr. Watson is survived by his widow and one daughter, Miss Margaret Watson. He also leaves an aged mother and brother, John Watson, President of the National Association of Nurserymen, living in Newark, New York.

WILLIAM W. ESSIG.

Mr. William W. Essig, President of the Pontiac Nursery Company, died on Tuesday, January 23rd, 1917, at Stuart, Florida. Burial at Woodlawn Cemetery, Detroit, Michigan, on January 29th, 1917. Age 62 years.

Mr. Essig was one of the oldest Nurserymen in Michigan, having been in the Nursery business in Detroit the past 40 years. About 15 years ago he established the Pontiac Nursery Company, Pontiac, Michigan. Five years ago he was afflicted with a stroke of paralysis, which partly disabled him and during that time he has not been actively connected with the Company.

NEW JERSEY ASSOCIATION OF NURSERYMEN

The annual meeting of the New Jersey Association of Nurserymen was held at New Brunswick, N. J., on February 14, 1917. The following officers were elected for this year:

President, Carl H. Flemer, of the F. and F. Nurseries, Springfield, N. J.; Vice President, J. D. Eisle, of Henry A. Drer's, Riverton, N. J.; Secretary and Treasurer, A. F. Meisky, of The Elizabeth Nursery Co., Elizabeth, N. J.

It was the best attended and the best meeting the association has had; and some very good addresses were given by some of the members on different subjects interesting to nurserymen.



*By heck, we are going to Philly,
To the Nurserymen's Convention,
We'll have some fun and take in the sights,
Seeing things we must not mention.*

AMERICAN ASSOCIATION OF NURSERYMEN

President—John Watson, Newark, N. Y.
Vice-President—Lloyd C. Stark, Louisiana, Mo.
Treasurer—Peter Youngers, Geneva, Neb.
Attorney and Secretary for the Association—Curtis Nye Smith, Boston, Mass.
Executive Committee—John Watson, Chairman, Newark, N. Y.; J. B. Pilkington, Portland, Oregon; John H. Dayton, Painesville, Ohio; Henry B. Chase, Chase, Alabama; Theodore J. Smith, Geneva, N. Y.; J. R. Mayhew, Waxahachie, Texas; E. S. Welch, Shenandoah, Iowa; Lloyd C. Stark, Louisiana, Missouri.

CHAIRMEN OF COMMITTEES

Arrangements—Thomas B. Meehan, Dresher, Pa.
Arbitration—W. C. Reed, Vincennes, Ind.
Exhibits—Albert F. Meehan, Dresher, Pa.
Program—J. R. Mayhew, Waxahachie, Texas.
Report of Proceedings—Curtis Nye Smith, Boston, Mass.
Nomenclature—J. Horace McFarland, Harrisburg, Pa.
Tariff—Irving Rouse, Rochester, N. Y.
Press—Ralph T. Olcott, Rochester, N. Y.
Telegraphic Code—R. C. Chase, Chase, Ala.
Hail Insurance—Frank A. Weber, Nursery, Mo.
Publicity—F. L. Atkins, Rutherford, N. J.
Distribution—M. R. Cashman, Owatonna, Minn.
Legislation—William Pitkin, Rochester, N. Y.
Transportation—Charles M. Sizemore, Louisiana, Mo.
Landscape—W. H. Wyman, North Abington, Mass.

STATE AND DISTRICT ASSOCIATIONS

American Nurserymen's Protective Association—President, Irving Rouse, Rochester, N. Y.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.
American Retail Nurserymen's Protective Association—President, H. W. Marshall, Arlington, Nebraska; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.
Association Oklahoma Nurserymen—President, P. W. Vaught, Holdenville, Okla.; secretary, Jim Parker, Tecumseh, Okla. Next meeting during week of State Fair at Oklahoma City, last of September or first of October.
California Association of Nurserymen—President, John S. Armstrong, Ontario. Secretary, H. W. Kruckeberg, Los Angeles, Cal.
Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.
Connecticut Nurseryman's Association—President, Walter E. Campbell, New Haven, Conn.; secretary, F. L. Thomas, Manchester, Conn.
Idaho Nurserymen's Association—President, Anton Dledricksen, Payette, Idaho; secretary, J. F. Litooy, Boise, Idaho. No definite time has been set for next meeting. Probably in July at Boise, Idaho.
Massachusetts Nurserymen's Association—President, G. Howard Frost, West Newton, Mass.; secretary, Winthrop H. Thurlow, West Newbury, Mass.
Mississippi Nurserymen's Association—President, Theodore Bechtel, Ocean Springs, Mississippi; Vice-President, S. W. Crowell, Roseacres, Mississippi; Sec'y-Treas., R. W. Harned, Agr. College.
National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.
New England Nurserymen's Association—President, Harlan P. Kelsey, Salem, Mass.; Secretary, Charles Adams, Springfield, Mass. Annual meeting held on the last Tuesday in February.
New Jersey Association of Nurserymen—President, Carl H. Flemer, Springfield, N. J. Secretary-Treas., A. F. Meisky, Elizabeth, N. J.
New York State Nurserymen's Association—President, E. S. Osborne, Rochester, N. Y.; secretary, H. B. Phillips, Rochester, New York. Next meeting September. Probably at Utica.
Ohio Nurserymen's Association—President, T. J. Dinsmore, Troy, Ohio; secretary, W. B. Cole, Painesville, Ohio.
Oregon—Washington Association of Nurserymen—President, C. F. Breilhaupt, Richland, Wash.; secretary, C. A. Tonneson, Tacoma, Wash.
Pacific Coast Association of Nurserymen—President S. C. Miller, Milton, Oregon; secretary-treasurer, C. A. Tonneson, Tacoma, Wash. Place of next meeting to be decided later.
Pennsylvania Nurserymen's Association—President William Warner Harper, Philadelphia. Secretary, Henry T. Moon, Morrisville, Pa.
Southern Nurserymen's Association—President, Harry Nicholson, Winchester, Tenn.; secretary-treasurer, O. Joe Howard, Pomona, N. Carolina.
Tennessee Nurserymen's Association—President, A. I. Smith, Knoxville, Tenn.; secretary-treasurer, G. M. Bentley, Knoxville, Tenn.
Tennessee State Florists' Association—President, Karl P. Baum, Knoxville, Tenn.; secretary-treasurer, G. M. Bentley, Knoxville, Tenn.
Texas Nurserymen's Association—President, William B. Munson, Denison, Texas; secretary-treasurer, J. M. Ramsey, Austin, Texas.
Western Association of Nurserymen—President, Lloyd C. Stark, Louisiana, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

FRANCIS WINDLE

Just as we go to press we are advised of the death of Mr. Francis Windle, West Chester, Pa.

For many years Mr. Windle occupied the position of assistant nursery Inspector in Pennsylvania, and was recognized as a man who was most thorough and conscientious in his work. He has been ailing for some weeks, but death came unexpectedly.

DEMOCRATIC AUSTRALIA IS PROMOTING MONOPOLIES

It is a fact that not only does government in Australia permit business men to organize monopolies; it encourages them to do so, and, when the interests at stake are big enough and anybody holds back, it forces him into line. Take, for instance, the Australian Zinc Producers' Association, organized April 3, 1916, which brought into one group all of the Australian mining companies producing zinc concentrates. This monopoly was organized by the Federal Attorney General, the Honorable Hugh Mahan. The two largest producing companies didn't want to come into the combination; a forty-eight hour ultimatum went out from the government, and before the expiration of that period the organization, including all the Australian companies, was completed. * * *

Australia fully recognizes the advantage of combination in dealing with foreign trade, and she is, apparently, prepared to utilize every resource to aid her own people.—*The Nation's Business.*

IF I WERE A NURSERYMAN

I would prepare a series of letters on trees, shrubs and plants and the reasons for beautifying property;—the making of homes from mere houses.

I would call attention to the small outlay necessary to proper planting;—to the great advantage of planting to increase the value of property and to make it more saleable.

I would subscribe to Luce's Daily Landscape Architects Report and follow up each prospect. I also would get lists of owners of houses in the suburbs of large cities and send each one of my letters.

The first letter might show how the intrinsic value of property would be increased by proper planting. The second might deal with the making of homes from mere houses. The next might give the expense of planting different size lots and also suggest that the prospect send you the size, contour and shape of his lot for suggestions and prices of proper planting.

Many owners of city and suburban homes have the idea that shrubbery and gardens are an expensive luxury and so a little educational campaign on the part of the nurseryman will accomplish two results:—more business and more beautiful cities and suburbs.—Adv.



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WANTED—A good man, experienced in planting and Landscape gardening. \$20.00 per week. Give references.

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The leading varieties of Currant, Gooseberry, Grape, Blackberry, and Raspberry plants in one and two year grades including

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I offer a bargain in 2 year No. 1 Perfection Fays, and White Grape, Currants. Also, I can supply Shrubbery, Fruit and Ornamental Trees, and a fine stock of Hibiscus, (Red), Marvals, and Buddelyea (Butterfly Bush). My prices are reasonable for guaranteed 100% transplantable plants. Send your want list for prices by return mail.

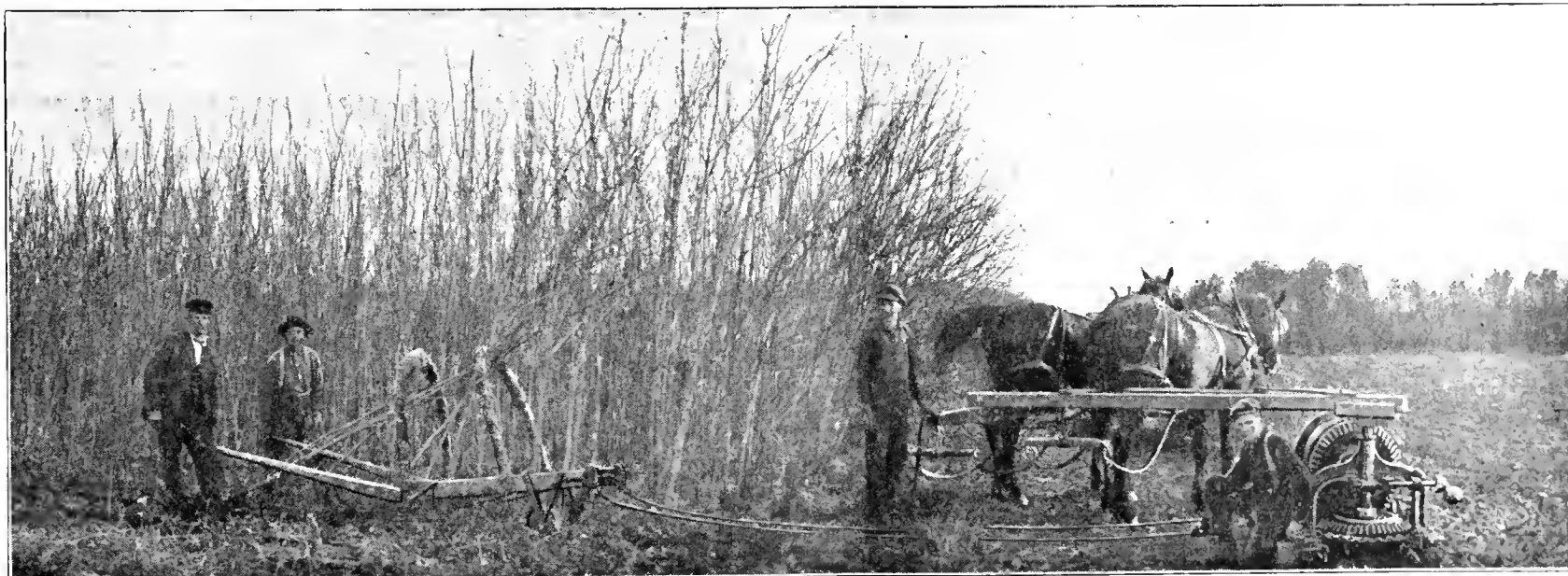
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Send us your want list for quotations.

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1200 Acres "At it 25 Years"

Strawberries	Currants	Rhubarb
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100,000 transplanted Raspberry, Blackberry and Dewberry plants
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**2 1/4-inch
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ROSES

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400 new and standard sorts

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OTHER SPECIALTIES: Gooseberries, Currants.

Send want list for prices.

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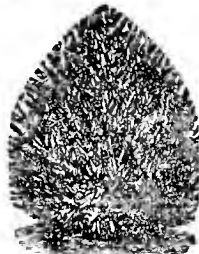
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If you need Everbearing strawberry plants to fill spring
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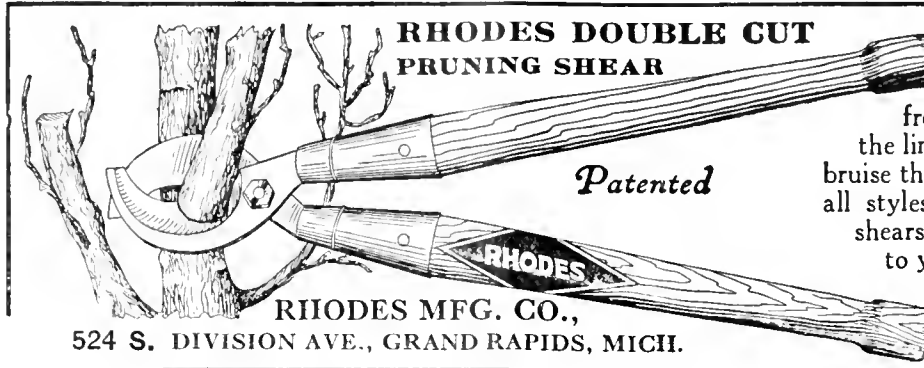
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all leading market sorts for Spring 1917

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ESTABLISHED 1893

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Specialties: Kalmias, Andromedas,
Ilex opaca, crenata, glabra, Azalea vis-
cosa, nudiflora, calendulacea and arbor-
escens, Cornus florida rubra, Vaccinium
corymbosum and macrocarpa, etc., etc.

Representatives:—

John Van Kleef and John A. Driesprong

From 1 February until 1 June

Care Maltus & Ware,
14 STONE STREET - NEW YORK

We Are Prepared To Supply The Trade

ROSES, Field-grown, own roots and budded.
ABELIA GRANDIFLORA. Transplanted, field-grown.
BERBERIS JAPONICA.
AZALEA INDICA (Home-grown)
GARDENIAS.
ENGLISH LAUREL.
MAGNOLIA GRANDIFLORA.
MAGNOLIA FUSCATA.
OLEA FRAGRANS.
CAMPHOR (pot-grown.)
LIGUSTRUM JAPONICUM, LUCIDUM, NEPALENSE,
and other good varieties, fine bushy plants.
SATSUMA ORANGE. Field-grown, budded on Citrus
Trifoliata.
BIOTA AUREA NANA (Berckmans' Golden Arbor-
vitae)
BIOTA AUREA CONSPICUA.
RETINISPORA. In variety.
JUNIPERUS. In variety.
WISTARIAS. Grafted, best sorts.
APPLES.
JAPANESE PERSIMMONS.
ENGLISH WALNUTS.
MULBERRIES.
SPIRAEA THUNBERGII. A beautiful lot of stocky
plants.
A fine stock of Hackberries, Koelreuteria, Tulip Pop-
lar, Magnolia Purpurea, Texas Umbrella, Sycamore and
Elms.

Send us a list of your wants and let us give you
quotations.

P. J. BERCKMANS CO., Incorporated
Fruitland Nurseries, Augusta, Georgi

Forest Tree Nurseries

Pine

Spruce

Evergreen trees for forest planting in any
quantity, from 100 trees to carload lots. Every
tree grown from seed in our own nursery.

We are offering a large block of six year old
White Pine transplants at surplus prices.

Write us for price list.

**KEENE FORESTRY
ASSOCIATION**

KEENE

N. H.

Berberry Thunbergii

3 to 4 feet

Not old, scrubby stuff—but young, clean, bushy and thrifty—just the stuff for your landscape trade. Write for prices.

Of course, we've got the smaller sizes—12 to 18 in., 18 to 24 in., and 2 to 3 ft.

Other good items on our Wholesale Bulletin. We'll gladly send you a copy if you haven't received one.

Chase Brothers Company

The Rochester Nurseries

Growers of Quality Stock.
Est. 1857

Rochester, N. Y.

W. B. COLE Avenue Nurseries Painesville, Ohio

FRUIT TREES

APPLES—Standard. Long list of varieties suitable for the home orchard. All strong, carefully selected stock on whole roots.

APPLES—Dwarf. A few good sorts to offer.

PEARS—Standard. Fine stock of two years trees as good as we have seen this year.

PEARS—Dwarf. Fair supply—largely Duchess.

PEACHES—All grades are perfect trees, both tops and roots. Large stock of Elberta and the new Late Elberta (Wilma).

RASPBERRIES—25,000 Kansas and Plum Farmer, one year and one year transplanted.

BLACKBERRIES—Large stock of root cutting plants, all carefully graded.

ORNAMENTAL TREES

CATALPA BUNGEI—2 year heads, 5 ft. stems.

CATALPA SPECIOSA—8 to 10 feet and larger, straight bodies.

ELM, AMERICAN—Fine block of trees in grades between one and two inch caliper. All transplanted spring 1915.

ELM, SCOTCH—All sizes up to 3 inch caliper.

HORSE CHESTNUT—Splendid lot 2 to 3 inch caliper, straight stems, symmetrical tops.

MAPLE, SUGAR—Several thousand specimen trees, 2 to 4 inch caliper.

SYCAMORE (Oriental Plane)—Large trees in sizes 3 to 5 inches in caliper. Also 20,000 one year for lining out.

Ask for our Trade List.

ORNAMENTAL SHRUBS

ALTHEAS—Bush and tree shape, 3 to 4 feet.

BARBERRY THUNBERGI—All grades including 2 to 2½ ft.

CORNUS SIBERICA—Several thousand plants 3 to 4 and 4 to 5 feet.

DEUTZIA, PRIDE OF ROCHESTER—Large stock 2 to 3 and 3 to 4 feet.

GOLDEN ELDER—3 to 4 and 4 to 5 ft., plants.

HYDRANGEA P. G.—Good supply of 18 to 24 inch and 2 to 3 feet.

PHILADELPHUS—Quantity of large plants at special low rate.

PRIVET—Large stock California Privet in three popular sizes—15 to 18 inches, 18 to 24 inches, and 2 to 3 feet. Strong grades.

SYMPHORICARPUS VULGARIS (Red Snowberry)—Will make low price on quantity of 2 to 3 ft. stock.

SPIREAS—Anthony Waterer, Billardi, Opulifolia Aurea, Tomentosa and Van Houtte in good supply.

EVERGREENS

Have been in great demand but a fair supply still on hand. Expect usual supply of Holland grown Conifers, Rhododendrons, Boxwood, Kalmias, etc.

Large stock of Mahonia Aquifolia, 18 to 24 inches.

PERENNIAL PLANTS

Hardy Chrysanthemums, Shasta Daisy, Delphinium Chinensis, Hibiscus, Hemerocalis, Iris German, Iris Japan, Tritoma Pfitzeri.

—On Hand!—

We have on hand and to dispose of—rather unexpectedly but very fortunately—four (4) boxes of

French Manetti Rose Stocks

Each Box containing
12,000 Manetti 5-10 m|m one year.

These Manetti have been received already; are in storage in New York City ready for IMMEDIATE SHIPMENT and can be delivered NOW.

Also the following

Fruit Tree Seedlings

Not yet arrived, but **ALREADY SHIPPED:**

12,000 APPLE,	7-12 m|m Branched;
60,000 PEAR,	7-12 m|m Branched;
50,000 MYROBOLAN,	5- 9 m|m
50,000 MAHALEB,	3- 5 m|m

All one year. We will sell these fruit-tree seedlings at the French prices, or we will sell them F. O. B. New York City.

We have other grades and some additional quantities still available in France. All orders now are CABLED and to give buyers some idea of our SERVICE, we will mention that one order we cabled the twenty-first of February was filled and SHIPPED the twenty-third! We will gladly quote freight and insurance rates and importing expenses under present conditions, on request. We sell DELAUNAY STOCKS—none better—evenly graded, carefully packed, promptly and efficiently handled. Write us; or—better—get busy on the wire! We deliver the goods!

JOHN WATSON & COMPANY
NEWARK, Wayne County, NEW YORK

March 1, 1917.

ORNAMENTAL STOCKS

NURSERIES
420 ACRES

WE GROW

FRUIT TREE STOCKS—All Sizes.
300 varieties of Conifers, 1 to 4 years old.
1200 varieties of Ornamental Trees and Shrubs, 1 to 3 years old.
1600 varieties of New and Old Ornamental Trees & Shrubs in all Sizes
250 varieties of Climbing Plants.
400 varieties of Conifers, 1 to 4 feet high.
400 varieties of Perennials.
800 varieties of New and Old Roses.

We Have No Agents.
Write direct to us and
ask for **WHOLESALE
CATALOGUES**

TRANSON BROS. & D. DAUVESSE'S NURSERIES,
16 Route d'Olivet **BARBIER & CO., Successors** Orleans, France

THE CHASE LABELS

For Nurserymen and Florists are Excelled by None
Plain, Painted, Wired with Tinned or Copper Wire and
PRINTED IN ANY MANNER that may be called for
*Prices as low as First-Class Work and Unequalled Promptness in
Delivery will justify.*

THE BENJAMIN CHASE CO.
P. O. Address, DERRY VILLAGE, N. H.
Western Union Telegraph, DERRY, N. H.

Forest Tree Seedlings

AND

ORNAMENTAL SHRUBS

We offer for spring 1917 our usual line of
Forest tree seedlings and Ornamental Shrubs,
Cuttings, etc. Write for spring trade list.

FOREST NURSERY COMPANY
McMinnville, - Tennessee

BAILEY'S BRAND NEW STANDARD Cyclopedia of Horticulture

The National Nurseryman, by special arrange-
ment with the publishers, offers this work on
easy terms. Six large quarto volumes. More
than 3,600 pages. 24 full page exquisite color
plates. 96 beautiful full page sepia halftones.
More than 4,000 text engravings. 500 Colla-
borators. Approximately 4,000 genera, 15,000
species and 40,000 plant names.

The new Standard Cyclopedia of Horticulture has been
freshly written in the light of the most recent research and
experience. It is not merely an ordinary revision or cor-
rected edition of the old Cyclopedia, but it is a new work
from start to finish with enlarged boundaries geographi-
cally and practically; it supercedes and displaces all pre-
vious editions or reprints of every kind whatsoever. It is
both an Encyclopedia and a Manual, for with the aid of
its Synopsis and Key, amateur and professional alike may
quickly identify any plant, shrub or fruit contained within
the set, and then receive expert instructions for its cultiva-
tion.

Volume V Now Ready

The National Nurseryman
Hatboro, - Penna.

NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER.—We offer all or any part of an
accumulation of long Nursery Bands one inch in width and
sixty inches to one hundred and twenty inches in length,
at a reduction of twenty dollars a ton. This offer holds
good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.

When writing to Advertisers please mention the National Nurseryman.

Harrisons' Strawberry Plants

Strong, Thrifty Plants grown on New Land and with an
Abundance of Fibrous Roots

STRAWBERRY PLANTS

5,000	Aroma	225,000	Klondike
5,000	Bubach	100,000	Lady Thompson
5,000	Brandywine	30,000	Mathews
65,000	Chesapeake	15,000	New York
25,000	Climax	25,000	Parson's Beauty
5,000	Early Ozark	50,000	Progressive
15,000	Excelsior	35,000	Superb
175,000	Gandy	25,000	Tennessee Prolific
5,000	Haverland	25,000	Warfield
11,000	Joe Johnson	10,000	Wolverton

PEACH—One-Year Budded

	3-4 in. 6-7 ft.	9-16 in. 5-6 ft.	1-2 in. 4-5 ft.	7-16 in. 3-4 ft.	5-16 in. 2-3 ft.
Alexander	50	50	50	25	25
Beer Smock	1,500	1,000	1,000	1,000	500
BELLE OF GA.	10,000	20,000	15,000	10,000	500
Bilyeu's			300	300	200
Brackett	300	500	500	400	300
Capt. Ede	100	100	100	100	100
Carman		3,000			
Chair's Choice	100	200	200	100	100
CHAMPION	3,000	3,000	3,000	3,000	3,000
Dewey	50	100	50	50	50
Early Crawford	500	1,000	1,000	1,000	500
Edg Beauty	100	200	200	200	100
ELBERTA	12,000	12,000	12,000	10,000	3,000
Eng. Mammoth	200	800	400	400	200
Fitzgerald	50	100	100	100	50
FORD'S LT. W.	1,600	2,000	2,000	2,000	2,500
Foster	50	100	100	100	50
Fox Seedling	500	1,800	1,800	2,000	500
Francis	500	500	500	500	500
Geary's	100	500	500	500	100
IRON MOUNTAIN	2,000	4,000	5,000	4,000	2,000
Kalamazoo	200	800	800	800	200
Lemon Free	100	300	300	300	100
Lorentz	100	400	400	400	100
Miss Lolo	100	200	300	300	100
Moore's Fav.	500	500	500	500	500
Mt. Rose	200	500	500	500	200
New Prolific	200	300	300	300	200
Niagara	400	400	400	400	400
O. M. Free	1,000	1,000	1,000	1,000	1,000
St. John	400	500	500	500	500
Salway	500	500	500		
Stephen's R. R.	300	300	300	300	300
Stump	400	400	400	400	400
Waddell	200	200	200	200	200
Walker's V., Free	300	300	300	300	100
Willett	100	200	100	100	100
Wonderful	800	800	800	800	800

APPLE—One-Year Budded

	$\frac{5}{8}$ in. 5-6 ft.	$\frac{1}{2}$ in. 4-5 ft.	$\frac{3}{8}$ in. 3-4 ft.
Baldwin	1,250	500	250
Ben Davis	1,250	500	250
Bonum	100	200	100
Delicious	9,000	4,000	2,000

Fallawater	300	200	100
Fameuse	600	1,200	600
Gano	450	500	250
Gravenstein	600	1,200	600
Grimes' Golden	1,000	3,000	2,000
Hubbardston	150	100	50
July	200	200	100
Lowry	150	100	50
Maiden's Blush	450	300	150
McIntosh	3,500	3,000	1,500
Northern Spy	1,600	1,200	600
Paragon (M. B. Twig)	3,000	3,000	1,000
Rambo (Winter)	200	200	100
Red Astrachan	200	200	100
R. I. Greening	3,500	1,000	500
Smokehouse	1,250	500	250
Spitzenburg	200	200	100
Stark	850	100	150
Stayman (Stayman's Winesap)	1,000	1,000	1,000
Sweet Bough	300	100	100
Tompkins King	300	100	100
Wagner	400	200	100
Wealthy	500	500	500
William's Ely. Red	10,500	5,000	2,500
Winter Banana	1,000	1,500	100
Wolf River	200	200	100
Yel. Transparent	12,000	9,000	6,000
York Imperial	500	1,000	500

APPLE—Two-Year Budded

	11-16 in. 6-7 ft.	$\frac{5}{8}$ in. 5-6 ft.	$\frac{1}{2}$ in. 4-5 ft.
Baldwin	8,000	4,000	2,000
Ben Davis	500	1,000	500
Fameuse	3,000	2,000	1,000
Gano	100	100	100
Gravenstein	3,800	1,500	700
McIntosh	5,000	5,000	2,500
Northern Spy	6,500	4,000	1,500
Paragon (M. B. Twig)	2,000	4,000	2,000
Rambo (Winter)	100	100	100
Red Astrachan	200	200	200
R. I. Greening	6,000	5,000	2,000
Smokehouse	1,400	800	400
Spitzenburg	400	400	100
Stark	3,800	2,500	700
Stayman's	3,200	3,500	1,200
Wealthy	100	100	100
Wm. Early Red	1,000	2,000	1,000
Wolf River	1,400	1,200	1,100

PEARS—Two-Year Budded

	$\frac{3}{4}$ in.	$\frac{5}{8}$ in.	$\frac{1}{2}$ in.	3-4 ft.
Bartlett	8,000	4,000	1,000	1,000
Clapp's Favorite	2,000	1,500	500	300
Seckel	2,000	1,600	600	400

KEIFFER PEARS—Two-Year Budded

	1 in.	$\frac{3}{4}$ in.	$\frac{5}{8}$ in.	$\frac{1}{2}$ in.
Keiffer	5,000	15,000	14,000	4,000

A complete list of other items that we have will be mailed on request

HARRISONS' NURSERIES,
Berlin - - Maryland



THE NATIONAL NURSERYMAN



APRIL, 1917

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

*Peach, Gooseberries,
Currants, Berberis,
Spirea Van Houtte,
Other Ornamental Shrubs,
H. P. Roses, Etc.*

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.
MONROE, MICH.

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa



Our Specialty

A large and complete line of high quality Nursery Stock
for the wholesale trade.

CARLOTS OF

Apple, Cherry, Peach. Green
Ash (*Fraxinus Lanceolata*), Elm American
White, Maple Silver, Sycamore
American, Shrubs in Assortment

Send for trade list and bulletins. Let us quote your wants.

If YOU were US
and WE were YOU,
then WE would be
buying from YOU.



FELIX & DYKHUIS

WHOLESALE NURSERIES

Boskoop, - - Holland

Ask for Our Beautifully Illustrated Catalogue

Watch Our Bulletins

They mean Quality
Stock, Right Prices,
and Prompt Shipments.

C. R. BURR & CO.

Manchester, : Conn.

PREPAREDNESS



Everybody is talking about preparedness—and it's a good thing. Not a few firms this Spring have their land ready for stocks—but have no stocks! They have been disappointed at the last moment in getting them.

By placing your order now for next season, you will be prepared—not only to save in the advance in prices—but you will get the grade and quantity ordered at the time you want them.

We will book orders now for any grade of Apple stocks or Japan Pear stocks, for delivery next Fall.

Our grades will be satisfactory to you—we make them so. You take no risk in transportation—we guarantee that stocks will arrive at your station in perfect condition.

Get out of the rut. Do not use inferior stocks because you can exchange something for them. Propagating stocks should be of the very best. We grow Apple and Pear stocks exclusively. We make no exchange, but give real value and satisfaction, with highest quality stocks.

For immediate shipment we can furnish about 100,000 No. 1 Apple Seedlings, 50,000 No. 2 and 100,000 No. 3. These are in perfect condition.



F. W. WATSON & CO.

TOPEKA, KANSAS

Apple and Pear Seedling Specialists.

WILL WRITE
DESIGN, ILLUSTRATE
AND PRINT
YOUR CATALOG



C O M M O N S E N S E

COMMON sense is the last thing used by most men in planning their catalog; either the catalog is elaborate when good, clean printing is sufficiently good enough, or it is cheapened in its pulling power by getting it down to a low cost. The two extremes.

WHY not let me analyze your catalog? It will result in your catalog being produced under specifications (Copy Writing, Designing, Illustrating and Printing) consistent with the conditions the catalog has to meet after it leaves your mailing desk.

MY service is succeeding because this common sense is adhered to in the Copy Writing, Designing, Illustrating and Printing catalogs for my customers. It is the sort of service that will make money for you by getting your mail order business at the lowest cost.

I WANT to hear from every Seedsman and Nurseryman who wants to increase his business along *sound, conservative* lines, and will be pleased to submit you plans and estimates on your catalog without your being under any obligation to accept my proposition.

IF you "put off" writing me now you may forget it and it's time now to start planning your fall and spring catalog.

WRITE NOW

700 GRAPHIC ARTS
BLDG.

W. A. GARRABRANT
Horticultural
Publicity

WRITE NOW

KANSAS CITY,
MO.

NOW TURN OVER AND READ WHAT A CUSTOMER SAYS

WILL WRITE
DESIGN, ILLUSTRATE
AND PRINT
YOUR CATALOG

READ This Letter From One of My Satisfied Customers

TEXAS SEED BREEDING FARMS

(INCORPORATED)

WE IMPROVE AND GROW FIELD SEEDS

Buy Direct
FROM SEED GROWERS
they are responsible
for the quality
of the seeds

Sherman, Texas

L. A. Markham, Manager

March 7, 1917.

Mr. W. A. Garrabrant,
Kansas City, Mo.

Dear Sir:

OUR
AIM
IS
TO
TREAT
YOU
PRECISELY
AS
WE
WOULD
HAVE
YOU
TREAT
US

We have just been thinking that it would be nothing but proper and just, having had your services for several years past, to give expression to our real estimate of your ability in your line.

The thing that has impressed us most strongly in dealing with you, is that you have not been content merely to comply with the terms of a contract, but you have shown the liveliest and most genuine interest at all times in getting up a truly attractive catalog for us, and your suggestions have been of almost inestimable value.

It is not necessary here to dwell on the pleasantness of your pleasant relations with us, but we must say that we have always felt you were just about as enthusiastic over our catalog and business out-look as we ourselves. To you, we give a very large measure of the credit, for the fact that we are adding this year just about three times as much business as we have done in any previous year.

We wish to assure you all this is very much appreciated and we shall be very glad, indeed, to reciprocate in any way we can whenever you feel the time opportune to call upon us.

Yours very truly,

TEXAS SEED BREEDING FARMS.

M-EV

L. A. Markham
Manager.

ERRORS
WILL
OCCUR
SOMETIMES
BUT
IT
IS
ALWAYS
A
REAL
PLEASURE
TO
CORRECT
THEM

I CAN do as well for you as I have done for this Texas firm, and will prove this if you will write at once stating number of catalogs you issue, enclosing a copy of your catalog.



ANY plans I submit will not place you under any obligation to accept them.

Personal Co-operation I Give Customers With All Details

Write
Me
Today

W. A. GARRABRANT
Horticultural
Publicity

Your
Inquiry
Solicited

700 GRAPHIC ARTS BLDG., KANSAS CITY, MO.



PAINESVILLE NURSERIES



We have one of the best stands of Tree Shaped Hydrangeas in the Country.

SPECIAL MENTION

STANDARD PEARS. A fine stock of choice varieties in which we have a surplus of Anjon, Bartlett and Clapp. Have **Dwarfs** in most varieties; Duchess in quantity. **PEACHES** are selling freely; would advise prompt placing of orders to ensure varieties. **GRAPES.** We have a particularly fine lot of Concords and Moore's Early and are well supplied with most sorts. **AMERICAN CHESTNUTS.** Can furnish large orders in first class stock, from 6 to 8 feet down to 2 to 3 feet.

ORNAMENTAL TREES. Among the kinds which we have yet in surplus are Cut-leaf Weeping Birch, the smaller grades of Horse Chestnut, European Linden, the balled, imported Magnolias, and European Sycamore 8 to 10 and 10 to 12 feet.

BARBERRY THUNBERGII, Buddleia, Hydrangea Pyramidalis 1½ to 2 and 2 to 3 feet, and a grand lot of 3 to 4 and 4 to 5 foot tree form Hydrangea. California Privet, Snowberries, Red and White; Spiraea Thunbergii.

HARDY PERENNIALS. A big lot of the best Hardy Phloxes, German Iris, Hollyhocks, Bleeding Heart, Yucca.

THE STORRS & HARRISON CO.

NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

When writing to Advertisers please mention the National Nurseryman.

OUR BULLETINS

Of unsold stock are printed and mailed every two weeks now.

Do you get yours?

If not, ask for the latest copy.

We have good assortments still to offer, including stocks of many scarce articles, not easily to be obtained elsewhere.



Jackson & Perkins Company

GROWERS OF THE "PREFERRED STOCK"

NEWARK

NEW YORK

Heikes—Huntsville—Trees



To Meet Your Needs in
Peach, Apple, Cherry, Pear, Plum, Compass-Cherry-Plum, Apricot, Pecan Seedlings, Privets, Roses (budded and own-root), Abelia Grandiflora, Berberis Thun., Spirea V. H. and Reevesiana, Lonicera Fragrantissima and Halleana, Kudzu Vines, and Sundry Ornamentals.

In good assortment of standard varieties. All our own growing.

Send us your orders and inquiries.

ROSES, Budded H. P's. One of our Specialties.

We grow them by the hundred thousands.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

FIFTIETH YEAR

T. S. HUBBARD GO.

FREDONIA, N. Y.

The longest established and best known growers of

Grape Vines

And the largest stock in the United States



CURRENTS and GOOSEBERRIES

A fine stock of leading varieties. One and two years.

BLACKBERRIES

The largest and best stock of root-cutting plants in this country. All the best varieties. Snyder in great quantity. Our blackberry plants are as well furnished with fibrous roots as our well-known grape vines.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of
Own Root Roses

ORNAMENTAL TREES SHRUBS

BERRIES CLEMATIS

EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

70 Years

1000 Acres

When writing to Advertisers please mention the National Nurseryman.



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE

THE

North-Eastern Forestry Co.

CESHIRE

...Connecticut...

57 Varieties

"There are 57 rules for success in business. The first is to DELIVER THE GOODS;—never mind the other fifty-six"

The fellow who said that must have been a nurseryman; he said something; he knows. To sell what you have and to deliver what you sell; grown with a know-how and served daintily and hot from the oven—or, not to mix it,—properly packed and shipped on time—that's what makes us happy in the spring rush.

We are trying to make folks happy. Our Spring List offers a combination of Goods and Quality and Service that will smooth those wrinkles away. Don't worry over shorts and delays. Write or wire:

Princeton Nurseries

Princeton - New Jersey

April, 1917.

J. H. Skinner & Co.

Topeka, - Kansas

Apple Seedlings

Japan and French
Pear Seedlings

Forest Tree Seedlings

FRUITS TREES

SMALL FRUITS

Rhubarb, Myatt's Linnaeus, divided roots, pure stock; Shade Trees, including a fine lot of Soft Maple and White Elm.

CATALPA BUNGEI

6½ foot stems, straight and smooth

Bechtel's Double Flowering Crab
Ornamental Shrubs

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

Rawhide Brand of Shipping Tags and Tree Labels

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

ORNAMENTAL

TREES, SHRUBS, VINES, EVERGREENS
HARDY HERBACEOUS PLANTS
225 Acres

Entirely devoted to the growing of the best quality of ornamental nursery stock.

WHOLESALE ONLY

We also grow the "unusual" things, you cannot find elsewhere.

Small Trees and Shrubs for
Planting in Nursery Rows.

We shall have our usual supply for Spring delivery. Catalogue ready January first.

RAFFIA HEADQUARTERS

Supply of our usual brands on hand at all times.

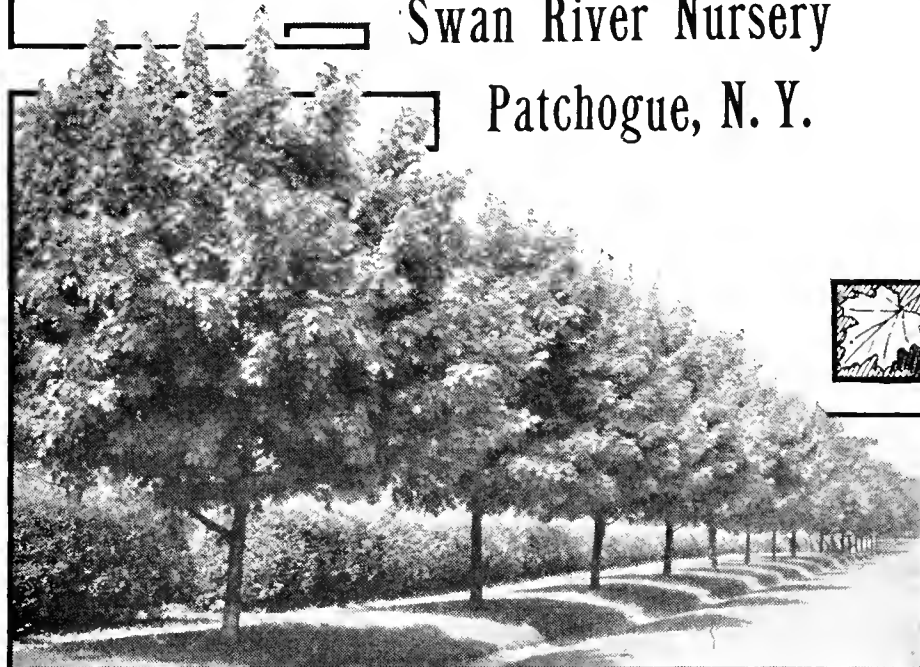
Thomas B. Meehan Co.,
WHOLESALE NURSEYMEN
Dresher, - Penna.

There's Money in These Norway Maples

They're big fellows. Just what planters want for lawn and street; heavy tops, trunks 1 to 3½ inch caliper. These trees are "extra" in every respect. Write for quotations for spring delivery. Attractive prices in quantity.

Swan River Nursery

Patchogue, N. Y.



...Wanted Quick...

1,000,000	Assorted Blackberry root cuttings.
10,000	One year old Cuthbert Raspberry plants.
2,000	" " " Golden Queen Raspberry plants.
50,000	" " " Downing Gooseberry plants.
500,000	Senator Dunlap Strawberry plants.
1,000	One Year small Victoria Rhubarb.
25,000	" " Cherry Currant plants.
10,000	" " Black Naple Currant Plants.
5,000	" " White Currant plants.
100,000	Cherry Currant cuttings.
50,000	Black Naple Currant cuttings.
25,000	White Currant Cuttings.

We pay cash.

E. De Roo Mitting, General Manager
H. J. & Alfred Mitting's
Nurseries
MORRIS, ILL.

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Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
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Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa.

The Best Tree Digger on Earth



Used and Recommended by Leading
Nurserymen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

Stark Bros. Nursery & Orchards Co.
LOUISIANA, MO.

The Best In Nursery Products

We carry a full line of fruit and ornamental trees, evergreens, shrubs, etc. Send us a list of your wants.

A FEW SPECIALS

Oriental Planes from 1¼ to 3 inch caliper. A large stock of Sugar Maples, American Elms, Carolina Poplars, Lombardy Poplars, Beech grafted River's, and Fern-Leaved, Double Flowering Japan Cherries, Prunus Pissardi, Flowering Apples, Flowering Peaches, Magnolia Tripetela, Japan and American Judas, Japan Walnuts, American Arbor Vitae, Hemlock and Norway Spruce, Altheas, Forsythias, Philadelphus, Viburnum Plicatum, Weigela, Eva Rathke, etc.

10,000 Downing Gooseberries, 2 years No. 1.

HOOPES BRO. & THOMAS COMPANY

THE WEST CHESTER NURSERIES

Established 1853 West Chester, Pa. Incorporated 1907



BERRY'S Wholesale Nursery

Small fruit plants in variety; rhubarb; horseradish; California Privet; Barberry Thunbergii; Hydrangea P. G.; Spirea Van Houghti; Peonies—home grown and imported; Imported Boxwood, etc.

Stock in storage. Can ship any time.

See list before placing your order.

P. D. BERRY,

Dayton

Ohio

Franklin Davis Nurseries, Inc. BALTIMORE - MARYLAND

OFFER FOR SPRING 1917

APPLE 1-2-3 Year

Heavy stock of McIntosh, Wealthy, Baldwin and all leading varieties.

Grimes Golden topworked 1 and 2 yr. heads.

PEACH

The finest lot we have ever grown. Heavy on Elberta, Carman, Belle of Ga., Crawfords, Salway, and all the leading kinds.

STD. PEAR

Kieffer 2 and 3 yr., all sizes at a low price. Garber, LeConte, &c.

SHADE TREES

Oriental Planes—the coming tree for city and suburban planting, all sizes. Special prices on transplanting sizes. Norway, Silver and Sugar Maples; Carolina and Lombardy Poplars; Red, Pin, and Willow Oaks, etc.

PRIVET CALIFORNIA

By the carload 1 and 2 yr., all sizes.

ASPARAGUS 2 Years



Barrs, Conovers, Giant, Palmetto.

PEACH SEEDS

1000 Bushels Promiscuous.

WRITE for prices and wholesale Trade List.
Samples upon request. Place your orders early.

FOR THE SPRING OF 1917

 We offer our usual line of 
Apple, Plum, Cherry, Peach, Shade
and Ornamentals.

WE CAN FURNISH IN LARGE QUAN-
TITIES AND CAR LOTS

2 year Montmorency & Early Richmond Cherry
American Elm, 1¼ to 4 inch in caliper

Norway Maple, 8-10 ft. and 10-12 ft.

Soft Maple, 6-8 ft., 8-10 ft., 2½-3 in. caliper,
3-3½, 3½-4.

Catalpa Bungei, 1 and 2 year heads

C. M. Hobbs & Sons

Marion County

Bridgeport, - - Indiana

"A Bird in the Hand"

Or a Box of Seedlings, for that matter, is
worth a Dozen "Somewhere in France."

We have on hand a few Boxes of **Pear Seed-**
lings 7-12 m|m branched roots one year 8,000
to the box;

And a few Boxes of **Myrobolan Plum** 5-9 m|m
one year packed 10,000 to the case.

They will help out late buyers and complete
those plantings. **On hand now, ready for im-**
mediate shipment.

Write or Wire:

—O—

John Watson & Company

NEWARK, WAYNE COUNTY, NEW YORK

April, 1917.

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Spring 1917

GRAPE VINES—One and two years old. Varieties
largely Moore's Early, Concord and Niagara.
Also Scarlet or Crimson Clover Seed and Cow Peas.
Free from weed seeds, all recleaned and guaranteed
first class.

Correspondence solicited. Price list upon request.

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Long Distance Phone and Telegraph, Salisbury, Md.

The Framingham Nurseries

200 Acres
High Grade
Trees, Shrubs,
Evergreens,
Vines, Roses,
Etc.



Fine Stock
of
Rhododendrons
Kalmias
and
Andromedas

Send for Price List

W. B. WHITTIER & CO.

FRAMINGHAM, MASS.

We have a splendid stock of
Grape Vines

and other small fruit plants for the Nursery trade, graded
up to the highest standard and sure to please you.

Give us a trial order, send in your list now for quotations

WHEELOCK & CONGDON

SUCCESSORS TO
WILLETT & WHELOCK

North Collins, - N. Y.

Foster-Cooke Co.

Nurserymen

Fredonia, N. Y.

Growers of

Grape Vines, Gooseberries, Currants

One and two years old. Graded up to the highest standard.
Our stock never looked better. Write us for catalog. Send
us your list of wants. Our prices are right, our stock
A No. 1.

We grow our Stock up to QUALITY and GRADE, not
down to a price. Nevertheless, our prices are always in
line, you can't afford to pay less, and there's no sense in
paying more. If you are pleased with what you have been
getting, you will be better pleased with our stock.

V.G.'S VERY GOOD

HARDY NURSERY STOCK SUCH AS
AZALEAS, BUXUS,
CONIFERS, EVERGREENS,
PAEONIES, MAGNOLIAS,
RHODODENDRONS, ROSES, ETC.

Offered by

VAN GELDEREN & CO.

Wholesale Nurseries

Ask for Catalogue

BOSKOOP (Holland)

You can save Time and Money

if you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

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64-66 Hanover Street

Rochester, - - New York

Vincennes Nurseries, W. C. REED, Prop.

VINCENNES, - - INDIANA

Leading Specialties for Spring 1917

Cherry, Two Year, extra fine, leading varieties
in car lots

Cherry, one year, 11-16 up and smaller grades
Our Blocks of Cherry are perhaps the largest
in the country

Std. & Dwf. Pear, Japan Plum, Compass Cherry

Peach, One Year, Car lots or less

Weeping Mulberry and Bungei Catalpa

Hardy Budded Pecans and English Walnuts

WE OFFER

Grape Vines, Currants and Gooseberries

in all varieties and grades

—also—

Grape and Currant Cuttings and Light

Grade of Vines for Lining Out

in Nursery Rows

WRITE FOR PRICES

F. E. SCHIFFERLI, Fredonia, N. Y.

**We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS**

FOREST TREE SEEDLINGS we only have in limited
supply this season, and would advise placing your orders
early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade
list ready.

The Willadean Nurseries

Sparta, Ky.

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

We offer for Spring 1917

500,000 PEACH, 40 Varieties, 1 year buds

CALIFORNIA PRIVET, 1 year and 2 year

ASPARAGUS, 1 and 2 year

DOWNING GOOSEBERRY PLANTS, 2 year

BARBERRY THUNBERGI, 2 and 3 year transplanted

Can supply the above stock in car load lots or less, also,
have a large stock of Rhubarb, Cumberland Raspberry
Plants, Spireas, Deutzia Assorted, nice specimen plants.
Evergreens, Horse Chestnut, N. Maple, Lombardy Poplar
and Planes, etc.

PEACH TREES, CALIFORNIA PRIVET, ASPARAGUS,
RHUBARB, Etc., in storage, can ship any time.

We will make attractive low prices for early orders
Send List of Wants

For FUMIGATION With
HYDROCYANIC ACID GAS

"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as
near one ounce as possible. Destroys scale insects
on Fruit Trees, Nursery Stock, Plants under glass
and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.

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NEW YORK, N. Y.

WOOD LABELS

For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite,
combined with the quality of our product is un-
surpassed.

Samples and prices are at the command of a
communication from you.

Dayton Fruit Tree Label Co.

South Canal St., Dayton, Ohio

When writing to Advertisers please mention the National Nurseryman.

Evergreens! Evergreens! Who's got the Evergreens?

This question would be fully answered if you could visit our nurseries and see block after block, acre upon acre, planted solid to Evergreens.

EVERGREEN SEEDLINGS

The growing of Evergreen Seedlings has been a specialty with us for over half a century. That our stock gives satisfaction is attested by a rapidly growing list of customers, whom we supply year after year. Here is a partial list of the leading standard varieties. We have other sorts not enumerated here, which will be quoted upon request.

SPECIAL NOTICE—For best results Evergreen seedlings should be bedded out close together for one or two years, under shade, where they can be watered, after which they can be transplanted out into open field rows. The observance of this plan is quite essential, and perfect stands should result.

Abies Balsamea (Balsam Fir)
Abies Tsuga Canadensis (Hemlock)
Abies Concolor (Concolor Fir)
Abies Douglassi (Douglas Fir)
Juniperus Communis (English Juniper)
Juniperus Scopulorum (Rocky Mt. Silver Cedar)
Juniperus Virginiana (Red Cedar)
Picea Alba (White Spruce)
Picea Canadensis (Black Hill Spruce)
Picea Engelmanni (Englemann Spruce)
Picea Excelsa (Norway Spruce)
Picea Pungens (Colorado Blue Spruce)

Pinus Austriaca (Austrian Pine)
Pinus Banksiana (Jack Pine)
Pinus Mugho (Dwarf Mugho Pine)
Pinus Ponderosa (Bull Pine)
Pinus Resinosa (Red or Norway Pine)
Pinus Rigida (Pitch Pine)
Pinus Strobus (White Pine)
Pinus Sylvestris (Scotch Pine)
Taxodium Distichum (Bald Cypress)
Taxus Canadensis (American Yew)
Taxus Cuspidata (Japanese Yew)
Thuya Occidentalis (American Arbor Vitae)
Thuya Orientalis (Chinese Arbor Vitae)

Write for complete wholesale catalog, which lists our complete line, in all sizes and varieties.

THE D. HILL NURSERY CO., INC.



EVERGREEN SPECIALISTS
LARGEST GROWERS IN AMERICA

Dundee, Illinois

BOX 401



TWO GOOD SORTS THAT WILL ALWAYS MAKE MONEY FOR YOU.

RED CEDAR

Juniperus Virginiana (Genuine Platte River Type)

Red Cedar is the great American Juniper and certainly is worthy of the highest endorsement for general planting. It has been tested thoroughly in each and every state in the Union and has proven entirely satisfactory. Red Cedars are hardy, growing fast, thick, bushy, upright and tall like a column. The foliage is a beautiful light green in summer, turning to bronze in winter; rather soft in texture and takes a graceful habit of growth. In season it is covered with bright blue and silver colored berries which adhere to the branches a long time. Its foliage emits that pleasing, spicy, fragrant, woody, cedrus odor, so characteristic of Cedars and Junipers. Certain it is that its beautiful foliage and graceful form have attracted world-wide attention.

Seedlings	Specimen	Transplants
3-16"	3-4'	6-12"
6-10"	4-5'	12-18"
	5-6'	
	6-7'	
	7-8'	
	8-9'	

DOUGLAS FIR

Abies Douglassi
(Hardy Colorado Type)

A native variety from the Rocky Mountains and always referred to as one of the most beautiful and valuable of American Conifers. Has strong, upright habit of growth, with beautiful, soft green foliage upon long drooping branches. Being perfectly hardy, enduring extreme heat as well as extreme cold, it can be successfully planted in all parts of the country. Especially valuable in producing natural and wooded effects, although its beauty is best displayed when used as an individual specimen.

Seedlings	Specimen	Transplants
3-16"	2-3'	10-12"
6-10"	3-4'	12-18"
	4-5'	18-24"
	5-6'	2-3'
	7-8'	3-4'
	8-9'	

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK
The National Nurseryman Publishing Co., Incorporated

Vol. XXV.

HATBORO, PENNA., APRIL, 1917

No. 4



Leucothoe Catesbaei

This beautiful native evergreen should be grown by American nurserymen much more extensively than it is.

Leucothoe Catesbaei

THE subject of our illustration is perhaps the most beautiful of all the native evergreen shrubs. There are some that are more showy, such as the *Kalmia* and *Rhododendron*, especially when in flower, but an arching spray of the *Leucothoe Catesbaei* in flower is perfection itself.

When the florists use the foliage of a plant for making their floral designs, it can be depended upon to be good, and this plant has been a favorite with them for this purpose for a long time.

Nurserymen are not so much interested in the value of a plant for cut purposes, as its usefulness as a decorative subject when growing. The *Leucothoe* is everything that could be desired except its adaptability. It is not a quick and easy grower, except under conditions that suit it.

Being an ericaecous plant, it wants about the same treatment as the *Rhododendron* and *Azalea*. If it were as easy to propagate and grow as say the *Spiraea Van Houttei*, we should be planting it by the millions instead of hundreds as at present.

There is no finer plant for massing at the base of *Rhododendron* beds or as a cover plant along walks and

drives in semi-shaded places, without any consideration of the flowers, the long arching sprays are exquisitely beautiful in themselves, the leaves take on superb colors when growing in full sunshine, brilliant bronze and wine color.

Although belonging to the heath family, it is much freer growing than the majority of plants belonging to this group and transplants very readily.

It is propagated by division, cuttings of the underground runners and from seed. The seeds germinate readily when sown in sphagnum moss or peat under glass.

It would be well worth while for some nurseryman to specialize on this beautiful plant, there is little doubt that much could be done with it, if better demonstrated to the public.

Most of the stock procurable now is collected stock, which has perhaps been transplanted in the nursery and this is never uniform and good as stock that is nursery raised.

The Hollanders offer it in their lists and find a ready sale in this country, which is not to the credit of the nurserymen here, with a plant that is so common to the woods in our Southern States and so readily propagated.

Shall the Consumer Buy His Nursery Stock at Wholesale Prices?

A. C. Hanson, Sales Manager, The Hawks Nursery Co.

The return of Spring brings with it in ever increasing numbers that well known "pest" known to retail nurserymen as the Wholesale price-list in places where it does not properly belong.

It was indeed very unfortunate that the stinger in the Cashman resolution concerning the curtailment of the issuance of wholesale price-lists was removed before passage at the Milwaukee convention last June. Without a penalty a ruling or ordinance is null and void so far as a salutary effect is concerned. About all you get from the violator of the agreement or ruling is an apology whereas one might reasonably expect a cessation of infringement of rules if a fine or expulsion from the Society were a part of the by-laws. So far as any actual good having been accomplished is concerned, we all might just as well have saved our breath; saved a lot of time, discussion and energy in the passage of the Cashman resolution. We have not produced the Nurseryman's Directory and the wholesaler goes merrily on, sending out his price-lists wherever he thinks the fishing is good and business will result.

It has been said by some wholesale nurserymen that retail nurserymen have been known to sell below what might be termed retail prices. In answer to that, if the wholesale nurserymen, individually or collectively, are in accord with the Cashman resolution, the sum and substance of which is that wholesale price-lists shall only

go to men actually engaged in the nursery business who buy trees to sell again, what possible interest can the wholesale nurseryman have in the prices the retail nurseryman makes? What business is it of his any how? It is only reasonable to credit the retailer with sense enough not to quote losing prices and in any event, he is never on level terms with the wholesaler when it comes to quoting prices. In the last issue of the *Trade Journals*, there appeared some very fine articles written in the best of faith. They have been carefully thought out along the lines of harmony within the organization and no doubt with a view of placating the wrath of the retail nurseryman. This mantle of charity has been thrown about the shoulders of the retail nurseryman for a good many years, but each year the pill becomes a little more bitter and requires a little more of a wash to down it. If you were a retail nurseryman, how would you feel about the following? The city of West Allis, one-half mile south of Wauwatosa, now having a Socialist administration, conceived the idea of buying two thousand elms which they are going to plant on city streets and charge back to the property owners. Invitation bids were extended. Ten firms responded, bidding as follows: 70c, 75c, 55c, \$1.15, 59c, 75c, 80c, 75c, 50c, 65c.

Our correspondent gave the names of the firms bidding

which we did not think it advisable to publish.—Editor.

The trees according to specifications were to be 1½ inch diameter, twelve inches above the ground. This list contains four wholesale nurseries and one firm which does a wholesale and retail business. One of these wholesale firms have already received quite a large order from this company. We have been buying from this firm for many years. Is there any reason we should feel especially friendly when we find that a wholesale company with whom we did business outbid us so far that we lost out entirely.

Another wholesale firm in Illinois, was favored with a good sized order from us this Spring. It came to our notice by accident that they were sending wholesale lists to our town. To confirm this, we had one of our own stenographers living in a neighboring town send for a wholesale price-list. In due time this wholesale price-list was accompanied by a letter to the effect that they were not allowed really to send out a wholesale price-list, but were doing it anyhow. This wholesale price-list was 20 per cent. higher than their regular price-list, but it contained a printed white slip stating that the prices were subject to a 20 per cent. discount so that any firm or individual could get large or small lots of stock at

identically the same prices as we would have to pay. Is there any reason why we should be friendly to this particular company?

It has just come to our notice that another nurseryman has been working up sentiment in Galesburg, Illinois, we think he has the Rotarians back of the movement, to buy shrubs, trees and general nursery stock in wholesale lots, presumably from him and give the citizens of Galesburg the benefit. Things are coming to a pretty pass when matters of this kind are going on unchallenged and if matters of this kind are allowed to go on as they are, it is only a question of time when the retailer will be shot to pieces in a business way and he can truthfully say to himself, "What good is the American Association of Nurserymen doing me and what is the use of paying dues and making an annual pilgrimage to the seat of the Convention."

I am satisfied from what I have learned lately that unless something that means something is done next June that will be of assistance to the retail nurserymen, that there will be wholesale resignations from the association. Most of the retail nurserymen up in the western part have felt for a good while that unless they organize along lines that will work for their own benefit they are never going to accomplish anything.

The Proposed National Quarantine

Forming opinions and passing judgment with incomplete or erroneous information, is a pastime we are all more or less guilty of, and this seems to be largely the trouble in relation to the proposed quarantine. The "National Nurseryman" addressed letters to a number of leading nurserymen, in various parts of the country, to find out the attitude of the trade on the subject.

Apart from the opinions expressed, there appears to be a general misconception as to the status of the proposed quarantine. In the first place, it is only a *proposed* quarantine, and it was not proposed by the Federal Horticultural Board or in fact by any one in authority whereby it is likely to be acted upon and become law in the very near future or as long as the Legislative Committees of the National Association of Nurserymen and Society of American Florists and Ornamental Horticulturists are actively opposing it.

The International Forestry Conference at their annual meeting held in Washington, D. C., January 18th and 19th passed the following resolution:

Resolved, that the American Forestry Association favor the principle of absolute national quarantine on plants, trees and nursery stock to take effect at the earliest date which may be found commercially expedient.

In the first place, it is a far cry from the American Forestry Association passing a resolution to that resolution becoming a law of the United States, and in the second place the resolution does not call for a quarantine until it becomes commercially expedient.

If one stops to think there is really not much cause for alarm that such a quarantine is likely to go into immediate effect.

It is wise however at all times to be fully prepared and it is every nurseryman's and florist's duty to be fully

posted, so that should an attempt be made to pass a quarantine law, he would be in a better position to help to prevent ill considered measures becoming law.

As pointed out editorially in our last issue, what we do not want is panic stricken legislature based on theory that may work incalculable harm to our business without accomplishing its purpose.

The majority of the letters received by the National Nurserymen oppose the resolution passed by the American Forestry Association.

An Indiana nurseryman says: "We believe that the necessary supply of fruit tree seedlings cannot now be grown in the United States, and that many nurserymen would be unable to keep up their supply of plants, if they could get none from Europe. We consider the French cherry seedlings superior to those grown in this country."

An Illinois nurseryman says: "We depend upon Europe for so much raw material in nursery stock, and it would work considerable hardship on the American nurseryman's interests, if a quarantine were passed at this time."

A New York nurseryman says: "We are inclined to believe that American nurserymen could be independent of foreign source of supply providing we had reasonable time to get ready."

A North Carolina nurseryman gives an emphatic "No" giving the reasons, "that we need some of the stock grown in the old country and they need the business."

A New Jersey nurseryman: "We certainly do not favor an absolute quarantine, which would mean a positive embargo on horticultural products, we do believe, however, that American nurserymen are entitled to some consideration in the way of protection and that they

should be either protected by quarantine or a tariff on their finished products.

"The present tariff affords little or no protection. We believe that an embargo should be placed on every kind of plant that is infected with disease or insects as every nurseryman knows the cost of keeping his stock clean and saleable."

Another New Jersey Nurseryman writes:—

"We think the present national quarantine regulation, if properly enforced, is strong enough to keep out all plant diseases and if it is not, it could easily be made so by Congress prohibiting the importation by private individuals, which is the source of most of the foreign plant diseases that have found a lodgment here and then to enlarge the powers of the Agricultural Department so that they could come to the aid of those States whose funds for the employment of inspectors are not large enough to allow for the employment of adequate forces to make close inspection."

A Minnesota nurseryman is of the opinion, that insect pests and disease are as natural as any other part of creation and that as long as the world lasts epidemics will visit the different localities in spite of quarantines.

A minority opinion comes from Minnesota favoring a quarantine, not so much however on account of danger of introducing disease and insects along with the nursery stock, but because the stock can be grown in this country.

These opinions and others are all worthy of serious consideration and give profitable food for thought.

"Editor, The National Nurseryman,"
Flourtown, Penna.

Dear Sir:—

We have not had opportunity until now to answer yours of March 9th inquiring our ideas relative to the proposed Federal Quarantine against imported nursery stock. It looks as if we nurserymen were to be legislated out of business entirely, sooner or later. We don't know just what we have ever done to deserve it, but between the new State and Federal Laws that are constantly being enacted, or agitated, it is becoming more and more difficult to carry on a perfectly inoffensive nursery business. It seems the fashion to make the nurserymen the goat for everything that happens to trees and plants, or that might, could, would or should happen to them. Apparently the chief reason that these laws are directed at the nurseryman, is because he is such an easy mark. He has let himself be gradually forced into a position where he has a lot of State and Federal officials riding on his neck, and they think it an occupation so necessary to the welfare of the "dear peepul" that they stick as tightly as Sinbad's, "Old Man of the Sea," and refuse to be shaken off. Doctors hunt out some new diseases now and then and make a big noise about them so that we shall properly appreciate the importance of the medical profession. Ministers are sometimes inclined, unwittingly perhaps, to put excessive stress on our sins of omission and commission—not because we are so very depraved and wicked, but because it is a part of their

job. Bug men and near-scientists must get up seare headlines over the way the wicked nurseryman is distributing Blister Rust, Black Wheat Rust, Scale Insect, Brown Tail Moth, and whatnot, or they could not continue to hold down their positions. We are certainly the victims of over-zealous activities.

We have yet to learn that it was a nurseryman who first imported Brown Tail Moth, Gypsy Moth, San Jose Scale, White Pine Blister Rust, and yet we are blamed for most of the ills that plant life is heir to. If the bug men and scientists must be provided with jobs, let them continue to inspect us. They only do what every first class nurseryman would do for himself, anyway. We, all of us, want to keep our stock clean and healthy—most of us would and must do it to hold our trade, regardless of official control and assistance. Reasonable inspection work is constructive and helpful—not destructive. It has compelled the shiftless few among nurserymen to look after the cleaning up of their nurseries, which was most desirable and commendable, but is there any common sense or justice in making the nurseryman clean out the scale from his place and then permitting his farmer neighbor to keep an acre or two of neglected orchard in a condition which provides a constant renewal of infestation. The nurseryman is the goat because he is numerically weak and he is easily gotten at. He is under control because he has manoeuvred into a position where he can't carry on business without official permission.

In this state it is now proposed to absolutely prohibit the growing or selling of all varieties of currants or gooseberries, except under special license, because of the alleged spread of White Pine Blister Rust thru the distribution of currants and gooseberries. And this without any real demonstration that currants or gooseberries *in a dormant condition*,—the only condition in which they are shipped—*can* carry the disease. Indeed, experiments conducted by Professor Stewart of the Geneva Agricultural Experimental Station indicated that black currants badly infested with White Pine Blister Rust one season, showed no trace of it next season, even though placed under conditions particularly favorable to its development. The Legislative Committee of the New York State Nurserymen's Association has had to fight this proposition in Albany just recently. Somehow, these things generally come up right in the Spring shipping season when the average nurseryman is most crazy with other troubles and anxieties. Is there any justice in autoeratically wiping out the nurseryman's business in currants and gooseberries, and then taking no steps whatever to eradicate the wild currants and gooseberries which are scattered thru the forests and, being in proximity to the pines are a much greater menace to them than nursery or garden plants?

I have gotten a good ways from the subject of the proposed exclusion of foreign nursery stock, and yet it is all pertinent to the topic, too, for such exclusion would, in my humble opinion, be the final act of unreasonable and unfair legislation needed to wind up the nursery business in this country. Our raw material in the form of seedlings and young stock comes from Europe and it is yet to be demonstrated that some very necessary kinds

of fruit tree seedlings can be successfully grown here at all.

Instead of entirely excluding foreign grown nursery stock, it would be much more sensible to permit the importation of it *only by Nurserymen*—that is, only in a commercial way. The same idea would apply, of course, to importations of florists' plants. Import shipments for nurserymen or florists are always of fairly large quantities and they could be located and inspected before they were further distributed, as is done at the present time without serious difficulty. Also, commercial importations come into the hands of people who are fairly competent to discover any injurious insects or diseases for themselves, and whose own self-interests would be the strongest possible incentive to take every means to eradicate them. It is time that we nurserymen stand up more vigorously for our rights and make the strongest fight we know how to against any more restrictive legislation. If we do not do it now, we might as well do as many of the liquor men are said to be doing—viz. look about for some other investment and occupation. It seems strange that the nursery business—a trade which makes the world more beautiful and more productive, should be as much the target for hampering and restrictive legislation as is the liquor trade, now universally admitted to be inimical to public welfare. That appears to be the situation, however, and we might as well make up our minds to fight and fight hard, or else hunt some other line of business.

Yours truly,

JACKSON & PERKINS COMPANY,

By G. C. PERKINS, *Treasurer*.

A few years since in placing his resignation with the Executive Committee our old Secretary, George Seager, expressed his appreciation of the National Nurserymen's Association in something like the following terms: "I have been connected with many business organizations, but I wish to say for the National Association of Nurserymen, that it is the finest body of men in both mind and heart, that I have ever known," and in casting about for the reason which has actuated so many of the Nurserymen in opposing the "Exclusion Act" proposed by the National Horticultural Board, I can find no better excuse than the quality attributed to them in the latter part of Mr. Seager's letter quoted above.

European countries have been and are likely to be for a long time to come at least, the principle sources of nursery importations. These countries today, are engaged in a life and death struggle and when it is over, they are bound to be left with a lot of cheap labor on their hands which can be utilized for nursery purposes and which will be disqualified for many other lines of labor.

With this labor they can produce and dump on American markets, stock at prices which will spell ruin to American nurserymen.

We have been told in the past that we cannot produce in this country many lines of stock which are now imported; perhaps this may be true, but I do not think so.

It has been fashionable in some European countries to send spies to America to investigate not only Govern-

mental affairs, but business affairs as well, and I am not at all sure that we have not received our share of attention from these gentlemen, and that they are not better posted on the cost of producing stock in this country, than American nurserymen are themselves, or after these investigations have been made that prices have not been so shaped as to drive American competition out of the market.

I for one am tired of this European interference in American affairs. I believe that we can produce in the United States every thing we seriously need if left unmolested for a short time to work out our problem. It may and doubtless will, for a time be inconvenient, but in the long run, I believe it will be for our best good.

There are doubtless good grounds for passing an Exclusion Act for quarantine purposes. Nearly all of the dangerously injurious insect pests we have to contend with now, are from abroad and most of them of recent importation. It is also a curious fact that many of these pests which with us are so serious, are, in their native habitat of no serious moment, due I suppose to climatic influence or to natural enemies.

This being true the Horticultural Board are, I believe, thoroughly justified in the course they are taking.

The American Forestry Association are, as I believe, supporting the Horticultural Board in this movement and it seems to the writer that the National Association of Nurserymen should join with the Forestry Association in this move or at least acquiesce in what is being done; for with our support or without we oppose this measure, it is reasonably sure to become a Law. If on the other hand we oppose the Exclusion Act and it should be defeated in a very short time we may need this very thing and find it most difficult to obtain.

Yours truly,

E. M. SHERMAN.

OPPOSITION TO THE PROPOSED PROHIBITION OF IMPORTS

At the regular meeting of the New York Florists' Club March 12th, the following resolution was adopted unanimously:

"That the New York Florists' Club protests against the proposed legislation which seeks to stop imports of plants, plant products, and bulbs, as being injurious to business—without giving any benefit to the public welfare, and that it looks to the Legislative Committee of the S. A. F. & O. H. to oppose it.

And that the Secretary be instructed to send a copy of this resolution to the Executive Committee of the S. A. F. prior to their meeting on March 16th, asking them to give full power to the Legislative Committee."

On March 12th, at their regular meeting the New York & New Jersey Plant Growers' Association adopted practically the same resolution as the above.

At the special meeting of the Legislative Committee of the S. A. F. & O. H., held at the Hotel Biltmore, March 15th, the subject was discussed from all angles. A few representative growers such as Julius Rochrs, J. D.

Eisele, Wallace R. Pierson, A. L. Miller, Adolf Gude and others were invited and a course of action was decided upon, one of the members being delegated to present the matter to the Executive Committee of the S. A. F. & O. H.

On March 16th, the Executive Committee of the S. A. F. & O. H. adopted unanimously the following resolution:

"WHEREAS, it has come to our notice that an effort is to be made to introduce legislation into Congress, seeking to prohibit at some future time the importation of Plants, Bulbs, Plant Products and Nursery Stock of all kinds from every source, and

Whereas the Executive Committee of the S. A. F. & O. H. considers such measures not only unnecessary, but injurious to the welfare of its members and to the whole horticultural trade of the United States, therefore be it

RESOLVED, that the chairman of the Legislative Committee of the S. A. F. & O. H. be empowered, and is hereby empowered, to oppose the proposed legislation, to act according to his judgment in the interests of our Organization at the forthcoming conference, to get what assistance he can from any of its members, and to share with the Nurserymen's Legislative Committee the expense of employing a trained man to help protect our joint interests."

The Legislative Committee of the S. A. F. & O. H. is now empowered, and prepared, to meet the Committee in charge of the proposed measure at a conference which will probably be called late in June.

J. McHUTCHISON,

Member, Legislative Committee.

PENNSYLVANIA QUARANTINES AGAINST FIVE-LEAVED PINES

This will officially announce the enactment of a quarantine by the State Department of Agriculture, prohibiting the shipment into the Commonwealth of Pennsylvania from any outside sources of any five-leaved pines.

This sudden action was taken to forestall the shipment into this state from Massachusetts and Connecticut of large quantities of white pines for reforestation purposes, which were contemplated by several large companies in this State. Although our Forestry Department is well supplied with two or three millions of young white pine trees, which have been offered without cost to these companies, nevertheless this offer was rejected, and they were about to place orders for these pines from the above states, where the white pine blister disease is known to be very generally established.

In view of the fact that a number of other states, in order to protect their five-leaved pines, have established similar quarantines, it seemed advisable not only from this standpoint, but from the standpoint of future protection to issue this immediate quarantine.

In some instances, our nurserymen have placed orders for certain five-leaved pines, especially ornamental var-

ieties, with nurserymen or growers outside the state. It is my purpose to assist our nurserymen in securing these orders in so far as possible, and where shipment is deemed advisable, depending entirely upon the origin of the material.

Therefore if you will send me a list of any orders for five-leaved pines, which you have placed outside the state, I will issue official permits for their introduction, provided we feel that they are coming from a safe locality. It will assist very materially if you can furnish us these lists of orders at an early date.

Very truly yours,

J. G. SANDERS, *Economic Zoologist.*

UNITED STATES DEPARTMENT OF AGRICULTURE, OFFICE OF THE SECRETARY. FEDERAL HORTICULTURAL BOARD.

Washington, D. C., March 17, 1917.

NOTICE OF PROPOSED QUARANTINE ON ACCOUNT OF THE WHITE PINE BLISTER RUST

The Secretary of Agriculture deems it necessary, in order to effectively prevent the introduction into the United States of the white pine blister rust (*Peridermium strobi* Kleb.), to extend the provisions of notice of Quarantine No. 7, issued May 21, 1913, to forbid the importation of all currant and gooseberry plants from Europe and Asia.

In compliance with Section 7 of the Plant Quarantine Act of August 20, 1912, (37 Stat. 315), a public hearing will be held at the Department of Agriculture, Washington, D. C., Room 410 Bieber Building, at ten o'clock a. m., on April 10, 1917, in order that all persons interested in the importation of currant and gooseberry plants from Europe and Asia may be heard either in person or by attorney.

Washington, D. C., March 17, 1917.

NOTICE OF PROPOSED QUARANTINE ON ACCOUNT OF THE WHITE PINE BLISTER RUST

The Secretary of Agriculture has information that a dangerous disease known as the white pine blister rust (*Peridermium strobi* Kleb.), not heretofore widely prevalent or distributed within and throughout the United States, exists in the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, New Jersey, Wisconsin, and Minnesota, on account of which it appears necessary to quarantine them together with certain other States or portions thereof, as indicated in the next paragraph hereof, in accordance with Section 8 of the Plant Quarantine Act of August 20, 1912 (37 Stat. 315), as amended by the Act of Congress approved March 4, 1917 (Public—no. 390—64th Congress), and to prohibit or regulate the movement from said States to other States and Territories of five-leaved pine nursery stock and currant and gooseberry stock.

It seems advisable to consider the establishment of this quarantine either (1) at the line of the western boundary of North Dakota, South Dakota, Nebraska, Kansas, Okla-

homa, and Texas or (2) at the western boundary of Minnesota, Iowa, Missouri, Arkansas, and Louisiana or (3) at the Mississippi River or (4) at some other line within these States.

It also seems desirable to prohibit or regulate the movement of said stock from the most seriously infected States, viz.: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, and New York, to those of less serious infection.

A public hearing will be held at the Department of Agriculture, Washington, D. C., Room 410 Bieber Building, at ten o'clock a. m., on April 10, 1917, in order that any person interested in the proposed quarantine may be heard either in person or by attorney.

During the past year the white pine blister rust has spread alarmingly in the previously known infected areas in New England and has been discovered in new localities

in the Middle West. The increase in the powers of the Secretary of Agriculture to deal with the movement of dangerously infected domestic nursery stock, conferred by recent congressional action, has made more effective measures possible.

STATE QUARANTINES

The following states have quarantined against all the five-leaved Pines, Currants and Gooseberries on account of the White Pine Blister Rust: Michigan, Pennsylvania, Wisconsin, Minnesota, and Kansas. Other states are likely to be added to the list in the near future.

Michigan gives special permit to ship currants and gooseberries from approved localities from whence there is no danger of infection.

Reminiscences

Adolph Muller has a vision of what the nursery business will be in 1945

It is now twenty-three years since we had under consideration bills to prohibit the importation of Nursery stock into the United States to take effect in the year 1920 and last for twenty-five years or more unless this law be repealed at the expiration of twenty-five years or in the year 1945. When I think back of those days, when we met as committees to debate and argue for and against this law, I recall the heated discussions, how little regard we had for each other's judgment. We were so nearly divided that it was always a tie and we seemed to get nowhere. Even our oratorical Mr. Curtis Nye Smith, from New England, came in with the blues, saying that some big corpulent Senator from New York told him in Washington to beat it back to Boston, as he was on a fool's errand trying to defeat this law of prohibiting the importation of nursery stock. I was rather elated to see our highly paid Attorney from the Hub getting the worst of the deal.

At the convention held at the Hotel Adelphi, Philadelphia, I remember Mr. Ernest Hemming, then Editor of "The National Nurseryman," stole out of the room and concocted a deal with the manager of the hotel to save us from beating one another up over the matter. The manager asked us to leave the room as it was required for other purposes, and, without being able to send more bill hustlers to Washington, we dispersed, and finally the bill became a law.

Those dark days are over, and, like in all other great events it was darkest before the dawn. These twenty years represent the greatest revolution in our business and every one engaged in it has had the greatest success that has ever come to a nurseryman. The industry has grown to be recognized as an enterprise of the first order and on a par with steel, railroads, electricity, etc. Look at your morning paper and see the shares quoted on Wall Street. Look at the trade papers. On page 1 I saw five million roses offered, and all of them

home-grown, for none are coming in. On another page all the varieties of Junipers and other evergreens in all sizes offered by a firm who makes a specialty of them and they can furnish each variety in 50,000 lots, all home-grown. When did anybody say it can't be done? Long long ago.

Bay trees and Azaleas for the florist trade finer than ever they were imported. The Azaleas are not of the flat top, sawed off shapes they used to be from Holland, they are better shaped and better grown.

From the names of these firms who advertise, we see our old and familiar friends from France, England, Germany, Holland and others. Many have come over to live and stay with us, and some have now branches here and are doing well, and the native American who prefers to leave the details and science of the profession to some one else, can still buy and sell and be a nurseryman too.

I just came back from Palm Beach, Florida, from a two months stay. There is a whole colony of nurserymen's cottages there. Why not? On my way through the south, I called on a number of firms whose home plants are in New York, New Jersey, Pennsylvania, Ohio, Illinois, Michigan, and in fact from nearly all northern states. I myself can refer to a small establishment of 1000 acres in the foothills of North Carolina.

It is really astonishing what a nurseryman can do with a good appetite, a spade, a little knowledge, a pocket full of seeds, a few cuttings, and presto he is on the way to a million.

Coming through New York I stopped at the Waldorf Astoria and met many of my friends either on the way north or on the way south, and everyone traveling in his own twin twelve Packard, twin sixes are out of date. I myself hung to my faithful Ford, till last year, when I succumbed to a \$10,000 Novelty. It was partly of ne-

cessity. The office charged it up to expenses to beat the income tax.

The National Association now owns its own building right here in Atlantic City, owns four city blocks of exhibition gardens, where every foot of space is eagerly sought out months in advance. We have every convenience, balconies where the Baby Ramblers can sit and sigh till the small wee hours of the morning, where Yellow Dog initiations are likely to take place any time. Now if you are not a member of the National Association come in and you can find out what the order of Yellow Dog means.

The Publicity Campaigns directed from these National headquarters are a revelation, tons of literature are being mailed out here under the super charge of Dr. MacFarland, and by his able assistant, Professor John Watson. Wonderful all this.

THE PROPOSED NEW PENNSYLVANIA NURSERY INSPECTION LAW

A bill has just been presented in the Pennsylvania Legislature providing for the inspection of nurseries and nursery stock, to replace the present law.

The new bill is practically a copy of the Uniform Inspection Bill, formulated jointly by the Association of Nursery Inspectors and the Legislative Committee of The American Association of Nurserymen some two years ago, a copy of which was printed in full in The National Nurseryman at the time.

In general, the bill defines a "Nursery," a "Nurseryman," a "Dealer," and an "Agent." It provides also for the appointment, by the Secretary of Agriculture, of a Nursery Inspector and deputies, all of whom are invested with police powers.

The Inspector is required to inspect at least once each year, all nurseries or other places in which nursery stock is grown, stored or kept for sale.

The Inspector or deputies also have the power to inspect any "orchard, fruit or garden plantation, cemetery, private premises or public places,"—and is required to do so "if reasonable evidence or suspicion of such infestation or infection is brought to his attention from a reliable source."

The Secretary of Agriculture is also empowered to "prohibit and prevent the removal and shipment or transportation of nursery stock or any class of stone or quarry products."

If any dangerous insect pests or diseases are discovered on any plant products or premises, provision is made for the notification of the owner, who must within reasonable time treat or remove the plants, and if he fails to do so, the Secretary of Agriculture is required to treat or destroy the stock and the cost of same assessed against the property.

"Nurserymen's" Certificates will be issued to nurserymen who grow nursery stock. Dealers will be given a "dealer's" certificate after they have furnished a sworn affidavit that they "will buy and sell only stock which has been duly inspected and certified by an official state or federal Inspector and that he will maintain with the In-

spector a list of all sources from which he secures his stock."

Nurserymen, dealers or other persons without the state, must file a certificate and obtain a certificate permitting them to solicit orders within the state.

All agents are required to "secure and carry an agent's certificate bearing a copy of the certificate held by the principal. Said agent's certificate shall be issued only by the Inspector to agents authorized by their principal."

Copies of certificates must be attached to each package shipped.

Provision is made for an appeal and for a hearing by the Secretary of Agriculture, in cases where a person takes exception to any order issued by the Inspector or his deputies.

THE WOMEN OF THE AMERICAN ASSOCIATION OF NURSERYMEN

At the last convention, held in Milwaukee, an association was organized, known as "The Women of the American Association of Nurserymen." Fifty-four members were enrolled at that time and since then there has been a number of additions.

Mrs. E. S. Welch, Shenandoah, Iowa, was elected President, Mrs. E. R. Taylor, Secretary, and Mrs. F. W. Watson, Corresponding Secretary.

The objects in forming this association were, to promote sociability among the members, to arrange to see different points of interest to the best advantage in the cities in which the convention is held, and to promote the interest of the women in the work of the American Association of Nurserymen. The dues are \$1.00 per year.

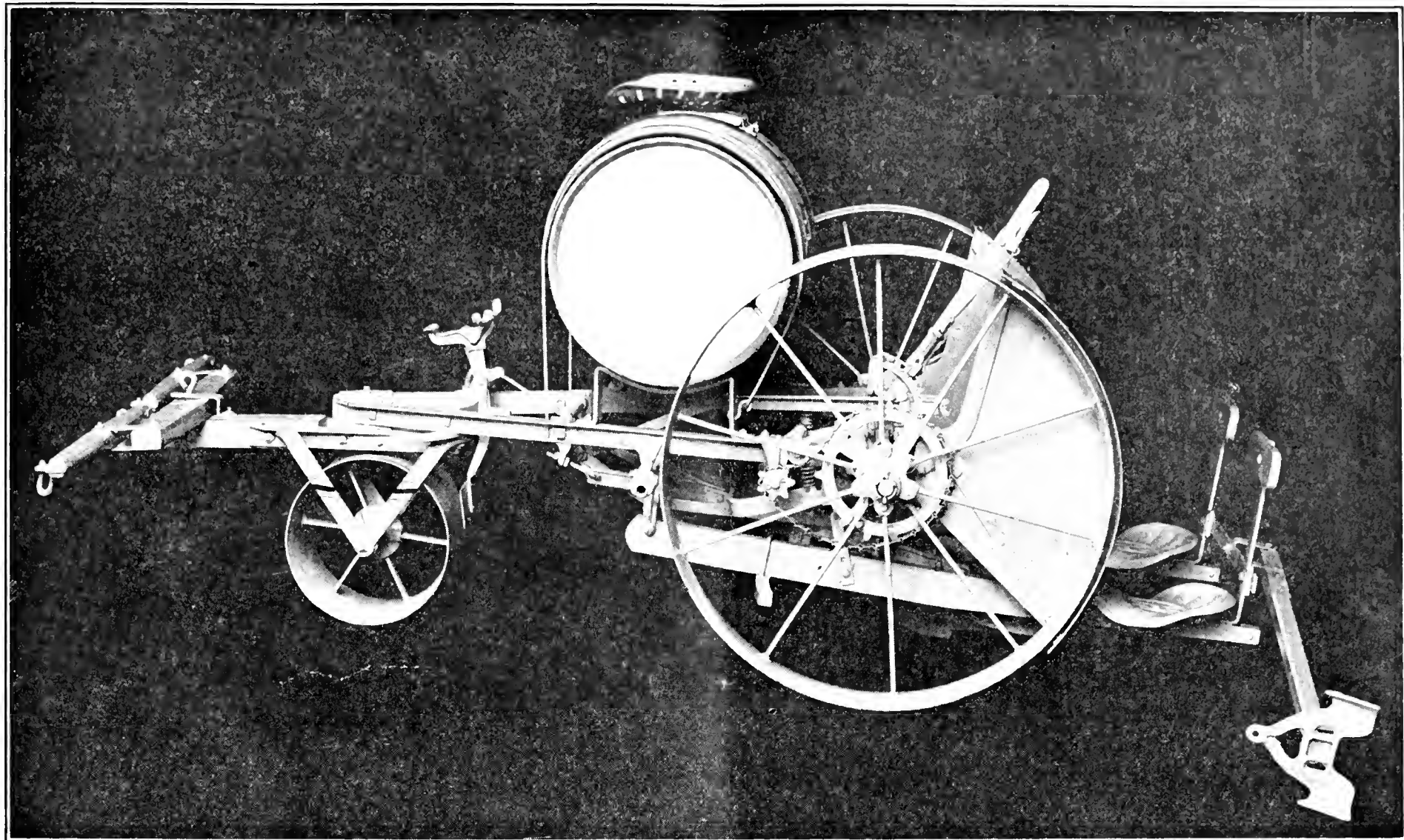
Already the "Women" are laying plans for a grand meeting at the Philadelphia convention, June 27th to 29th. The President has appointed Mrs. Thomas B. Meehan, Mt. Airy, Philadelphia, as chairman of the Committee on Arrangements and expects to make other appointments later.

The Managing Director of the Hotel Adelphia, the convention headquarters, is reserving a large parlor, which will be for the exclusive use of the "Women," and has enthusiastically entered into the arrangements to make the visit of the "Women" to Philadelphia, one long to be remembered.

Any of the wives or daughters of members of the American Association of Nurserymen who expect to attend the June Convention should certainly become members of the women's organization and should write at once to Mrs. F. W. Watson, Corresponding Secretary, Topeka, Kansas.

The way President Watson, of The National Association of Nurserymen, is appointing his committees, he evidently does not believe in the maxim of "Let George do it." He wants everyone to do their share of the work, and when you come to think of it, an Association that is run by a few does not amount to very much.

Tree Planting Machine



A machine which plants from 10 to 15 thousand forest tree seedlings a day, is in use at the Letchworth Park Forest and Arboretum, in Wyoming County, N. Y. It was designed to set out cabbage and tomato plants, but works equally well with trees. It is about the size of an ordinary mowing machine and is operated by three men and two horses. One man drives the team while the other two handle the seedlings. The machine makes a furrow in which the trees are set at any desired distance, and an automatic device indicates where they should be dropped. Two metal-tired wheels push and

roll the dirt firmly down around the roots. This is a very desirable feature, because the trees are apt to die if this is not well done. Two attachments make it possible to place water and fertilizer at the roots of each seedling. Another attachment marks the line on which the next row of trees is to be planted.

No cost figures are available yet, but officials say that the cost will be much less than when the planting is done by hand. It is stated that the machine can be used on any land which has been cleared and is not too rough to plow and harrow.

THE PINE BARK BEETLE

An insect less than a quarter of an inch long that may cause the death of large pine trees, is described in Cornell bulletin 383 recently issued by the college of agriculture. It has been found attacking white and pitch pines and is known to work also in spruce and larch, and to be widely distributed in many of the northern states.

The larva is a small white grub and, like the beetle, works in the cambium of the tree just inside the bark, making galleries and chambers in the wood. In the living tree the presence of the beetle may be indicated by "pitch tubes" through which the beetle pushes out the sawdust that results from its gallery making. The tree tries to close this exit with pitch with the result that the

so called pitch tubes become prominent spots on the tree trunk.

The beetle may attack living trees but usually confines itself to dying or recently dead trees, and its attacks may open the way for fungus diseases and for other insects. A wet season is hard on the beetles and also aids fungi which prey on them; black carpenter ants may also destroy the beetles. In the case of felled logs removal of the bark will cause the death of all larvae of the beetles and burning the bark will kill the adults.

This bulletin is said to be of interest only to entomologists and foresters and is not issued for general distribution. Requests from research workers will be filled as long as the limited edition lasts. Address the New York state college of agriculture, Ithaca, New York.

The Marvelous Advance In Peonies

By C. S. Harrison, York, Nebraska.

Twenty years ago it was hard to sell a peony. People did not know what they were. As soon as they were introduced to the modern peony, they bought it.

At first they associated it with the old ill smelling thing our grandmothers raised.

When the first edition of the Peony Manual was issued, people began to take notice. One wealthy man bought \$150 worth; another \$250, and so it went. Three editions have been issued and the papers have taken the matter up, and two years ago one nursery had to turn down a call for 35,000 from one firm.

Sixty years ago there were about fifty named sorts—now there are over 2000, and more being added every year.

It is interesting to note the methods of originating new sorts.

Some young peonies are dishonest, they do not keep their promise. I have had glorious double ones revert to a worthless single. A beautiful golden one dropped down to a muddy yellow. They must be confirmed by years of trial before they are given to the public.

Among our originators, the United States is fast forging to the front. Many of exquisite beauty come from France, but we are proud of our home successes.

Richardson, of Boston, has given us some very fine ones. Rosenfield now of Omaha, gave us Golden Harvest, which is a prolific bloomer and extremely hardy even in Manitoba.

T. C. Thurlow, of West Newbury, Mass., was the first to write a magazine article to call attention to this radiant flower. He had a splendid collection. About eighteen years ago, a representative of a wealthy man in Illinois came sauntering through his grounds, looked at the stakes, asked a few questions. Then he asked what will you take for the lot? "\$7,000" said Mr. Thurlow. "I'll take them," said the man. There were two carloads of them.

Then Mr. Thurlow cleared the decks for action, and determined to have one of the world's finest collections.

He gathered from Europe and America and commenced raising from seed.

Several years ago I visited him when thousands of seedling peonies were in bloom. It was a marvelous sight. He selected but a few out of those thousands. Among them is "Cherry Hill," which his sons are now selling for \$30 a root, and they are selling too.

But probably the largest propagating enterprise is at Fanhault, Minnesota, where for twenty years the Brand Nursery has given close attention to developing new varieties.

I saw many of them exhibited side by side with the choicest imported varieties and they did not suffer in comparison.

Mary Brand, named for the mother, is probably the

largest and most beautiful red in existence. This sells for \$15. Prince of Darkness and Midnight are dark red. These run at two dollars each.

Elizabeth B. Browning is a glistening white of immense size, is \$25. These prices seem enormous but they are selling rapidly.

It is a case of thoroughbreds and scrubs. Thoroughbreds cost the most but are the cheapest in the long run. Many sorts will double every year. That gives you 250 in ten years, original cost reduced to ten cents each.

But we are not to forget the old favorites, grand and queenly, Festiva Maxima, sixty years old, has been worth millions, and still is in great demand. Umbellata Rosea, a variegated rose is the earliest of the newer families, on hand in Nebraska to serve for Decoration day. Madam de Verneville is a beauty. Edulis Superba will always have a place. Duchess de Nemours, large white with greenish reflex will always be welcome. Baroness Schroder used to sell for \$5.00, sweet and beautiful as a rose, yet such a fine multiplier it is now down to \$1.00. The old and loved standbys can generally be had at from 25 to 50 cents.

Remember our slogan, "Beauty is wealth," raise a lot of it and be rich. A peony is worth more than a potato, and an iris more than a hill of beans.



*Card indexes, typewriters and new fangled inventions
Are only for the foolish and rich,
Don't attend conventions or have progressive intentions
They lead to bankruptcy and sick.*

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AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
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Hatboro, Pa., April 1917

THE NATIONAL ASSOCIATION OF NURSERYMEN

President Watson has just issued a circular letter we believe to nurserymen who are non-members of the American Association. It is so comprehensive a statement of the aims and objects of the Association that it should be sent to every member as well. It drives home the fact that the association does not represent one firm or a group of firms, but is earnestly aiming at making it a closely knit organization serving the best interests of the nursery business in the United States. There is no room for petty jealousies or selfish intrigue in an association which is working for the good of the whole trade. If it is to accomplish its objects it should have the confidence and unswerving support of all the members along the lines stated in Mr. Watson's letter.

Mr. Watson quotes very freely from the "Awakening of Business" by Hon. Edward M. Hurley, Chairman Federal Trade Commission, Washington, D. C. It proves pretty conclusively that the National Association of Nurserymen is working along the lines that have the endorsement of the best opinions in the business world on the subject. As Mr. Hurley says:

"One of the great and crying needs among American business men to-day is a broad view of business in general and a comprehensive grasp of the needs of industry as a whole. Too many American manufacturers and merchants centre all their energy and attention upon their particular establishment and the work of making profits from it. Men at the head of factories need the point of view of what might be termed the statesmanship of business. They need to appreciate the fact that their plant is a part of a great industry; that their individual welfare depends very largely upon the welfare and progress of the industry as a whole, and of industry in general. Whatever promotes the welfare of other concerns in industry and the welfare of that broad group of

people which we call the public, is bound to react favorably on individual concerns."

As Mr. Watson closes his letter he summarizes as follows:

"It is co-operation, getting together, working for the common good, and thereby gaining more individual profit than is possible without united effort; and it is to secure more of this cooperation among ourselves and from those not yet joined with us, but whose interests are the same as ours, that this letter is sent you. We, who are members, know that the Association as organized at present and with the work being done and that laid out for the future, we are getting far more value than our dues can measure. And we realize too, that many of the things we have planned can be worked out most effectively for our own good and the good of the whole trade if we have the cooperation of all the good firms, large and small, in the business. If you will look over the list of our committees, you will see that they include prominent nurserymen, scattered throughout the whole country; they are all successful in the management of their own affairs, and in directing this Association you can expect them to be equally successful; they are wholesalers and retailers; producers and distributors; some sell through agents and some by catalogue, so that every department of the business has equally a voice in the management of the Association. It could not be otherwise. The American Association of Nurserymen speaks for no class; it represents no section, it serves no special interests. We invite the membership and the cooperation of every reputable nurseryman in the country, who believes that the association and the cooperation of men engaged in the same line of business can be helpful to the trade they represent and therefore to all its members."

It is hardly necessary to dilate on the trouble-laden times. It is patent to everyone. Even the most superficial thinker, although he may not express it, knows the old order of things is passing away. Past history tells how individual countries have passed through the birth pains of new eras to go on to further prosperity and happiness or sink to degradation, according to their recognition of the eternal verities.

Through education, invention, science and art, the whole world has been drawn closely together, so that adjustment to the new order of things is world wide.

The ignorant, timid and superstitious see only disaster and the end of all material things, but the wise, fearless and enlightened see only the vision of a glorious future, and nerve themselves to guide and help towards its coming.

As with nations, so it is with business. If the goal is not selfish, and honesty and integrity govern the policy, it matters not how dire may be the forebodings or fear-some the outlook, the future is always bright because the Almighty rules. Faith and foresight are just as essential in business as in religious matters, and if the foresight is very restricted just keep on working hard.

PHILADELPHIA

The Convention City of the American Association of Nurserymen, June, 1917.

The Committee on Arrangements have selected the Hotel Adelphia as the headquarters in which to hold the convention of the American Association of Nurserymen, which will convene in Philadelphia, June 27th.

The Adelphia is one of the newer hotels, recently erected to accommodate the many visitors to the City of Brotherly Love.



Hotel Adelphia

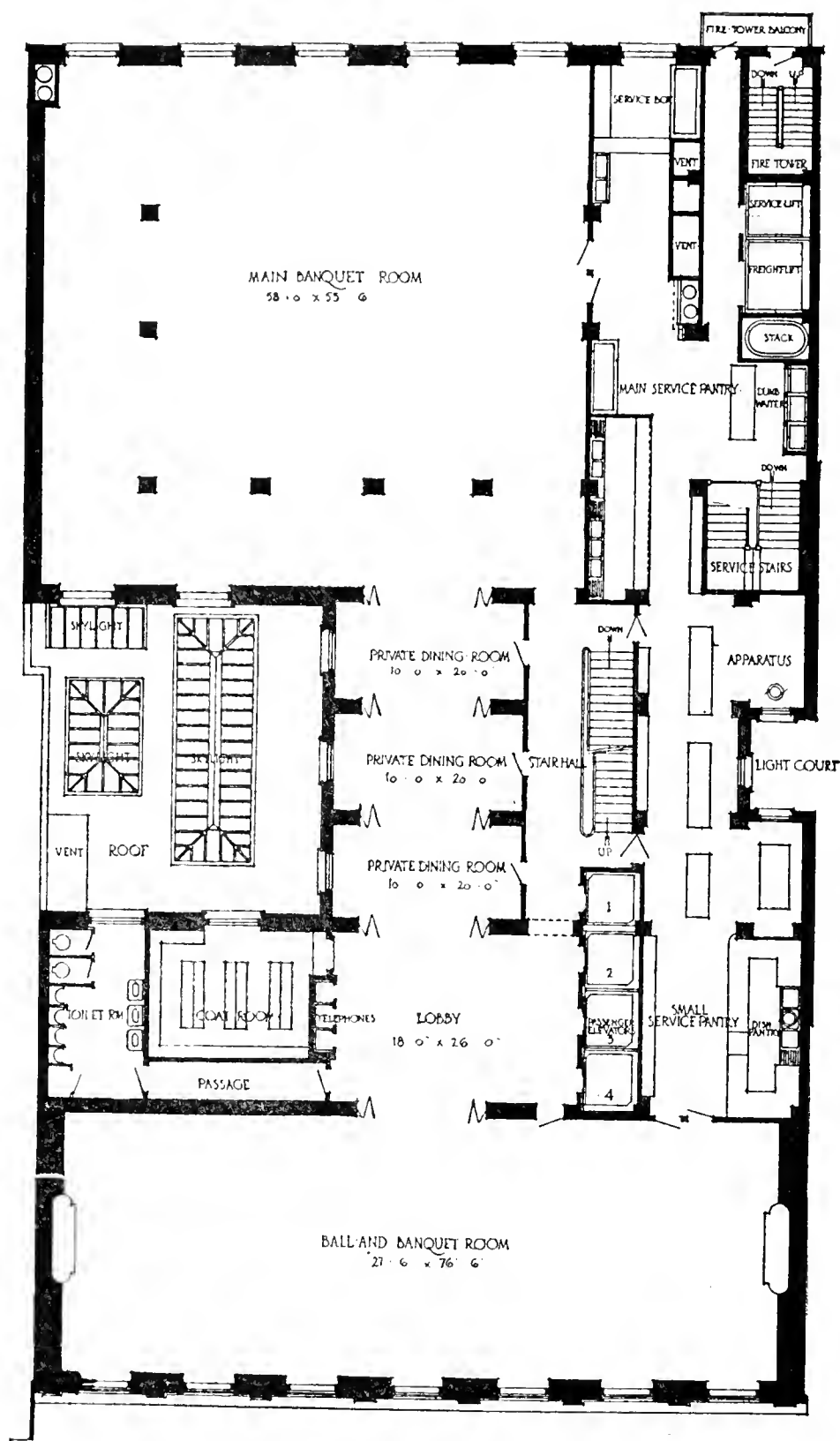
Selected as the Headquarters for the Philadelphia Convention

In the centre of the retail business section, yet but two blocks from both the Pennsylvania and the Reading Railroads, the Hotel Adelphia is a lofty structure, towering above the surrounding buildings and on its top floor is a commodious Roof Garden, where it is cool even on the hottest summer day.

There are four hundred sleeping rooms arranged singly and en suite, every room having an abundance of light and air, perfect ventilation, circulating ice water and every convenience to add to the comfort of the guest.

The Managing Director, Mr. David Provan, has reserved an entire floor for the use of the convention, as

shown in the accompanying floor plan. A large and commodious Convention Hall and near it another large room, which will afford ample accommodation for all exhibits.



Floor Plan Hotel Adelphia

Three smaller rooms on the same floor opposite the elevator, will be for the use of the Secretary and as committee rooms. These rooms have all been turned over for the use of the convention, free of charge.

Members intending to come to the Convention are urged to correspond with the Hotel and place reservations for their rooms at as early a date as possible. While the Hotel is large and commodious, yet there is always a crush at the last minute and to avoid this, early reservation should be made.

COMMON THINGS

By E. D. Pannell

Have been a reader of your paper for more than twenty years. Have frequently felt moved to contribute something, but the impulse would pass under a rush of work and nothing came of it. I have always found it interesting to read the observations and experiences of practical nurserymen and landscape men. It is these every day pictures carefully and accurately drawn that we appreciate the most. We like to hear as much about new uses and applications of common varieties, as about some new things (or some one fancies new, because he has just gotten acquainted with it himself, although some of us may have known about it for years). There is a reason why some things are common—common because good. If I should head my article "California Privet" but few would notice it. Anything written on so commonplace a subject would be considered unworthy of attention. Yet we must give attention to these things. Privet is now a necessity quite as much as shade trees on our streets.

I have observed in the cities of our section such as (Jersey City) how greatly privet hedges are prized. Little grass plots no larger than the surface of a dining room table are neatly defined by an extremely well clipped hedge of California privet. Some of these small lawns extend across one, two or three terraces leading down from the front steps to the side walk (Jersey City Heights). In such a case wherever the crest of the terrace occurs some ornamental projection is formed neatly clipped in the green of the hedge. Where this sort of decoration is started in a block, or square, it follows like an epidemic down the entire row. In such a case it is a pleasure to stand at a corner and look down that block, and observe how each neighbor has tried to out-do the next by clipping his privet to a more perfect line or to some fancy design. The clipping is almost always done by the man of the house, who becomes a past master at his work. No nursery employee could do so well, no professional hedge trimmer could better the job, for it could not be done better. How much these people prize these green hedges can be seen in the way they take care of them. They prize them the more because the plant is almost an evergreen and seldom loses foliage until January. Of course the cold of December purples up the foliage, but any tree or plant that holds its foliage well into December is bound to be popular in the cities. Twenty years ago there were no hedges there worthy of the name. The material used for hedging then was very expensive and not very good, hence little used.

As we go into the southern cities we observe the smaller light green leaf of the Amoor River privet which does not purple in the Winter's chill. Some strains of this are hardy in our latitude (New York City) and no doubt in a few years will supplant the older variety. (Some ten or twelve winters ago all the California privet hedges in this section froze to the ground).

The Oriental Plane is another common but very good thing in our northern city streets. Did you ever notice how late they hold their foliage? Long after the poplars and maples are bare the Planes are bright and

green. We who live in the country do not readily appreciate such an advantage. Many city dwellers look longingly on the foliage of their Plane trees and lastly the privet which is generally looking poorly by January, and then prepare for two months of dismal cold and more or less snow and ice. We should try to occupy the viewpoint of our customers if we ever can hope to do them a lasting benefit.

DISEASE-RESISTANT CHESTNUTS BY PLANT BREEDING

The possibility for continued growth of chestnut trees in the United States, in the face of the rapid spread of the destructive chestnut blight, may depend mainly upon replacing of the susceptible native trees by disease-resistant strains and hybrids bred from Asiatic stock. This is pointed out by plant pathologists of the U. S. Department of Agriculture who have made exhaustive studies of the disease in field and laboratory during the last five years. The chestnut blight, which is estimated to have caused already from sixty to one hundred millions of dollars damage in the eastern United States, and which is rapidly exterminating the American chestnut, came from eastern Asia on nursery stock.* The disease is common in both China and Japan, but in those countries causes relatively much less damage than in America. In both Asia and America the parasitic fungus causes cankers on chestnut bark, but in the American chestnut these cankers soon completely girdle the tree, and invariably cause death. In China and Japan, however, the trees commonly remain alive and productive for many years although cankered, the cankers seldom growing fast enough to girdle the trees.

The specialists have identified seven species of the genus of fungi to which the organism causing chestnut blight belongs, five of which now exist in the United States. None of these causes disease, except the one which causes the chestnut blight. Fortunately, the chestnut blight fungus rarely grows on trees other than the chestnut; during their studies the specialists were able to find but four such specimens—three of these were oaks, and one a maple. Inoculation experiments indicated that although the fungus can be made to grow on trees other than chestnut, it usually is but slightly parasitic in such cases and seldom injures the trees greatly.

In their age-long struggle with the blight the Japanese and Chinese chestnuts have acquired a high degree of resistance to it, and this fact is being utilized by the specialists in breeding resistant chestnut trees for American use. Hybrids between the highly resistant Japanese chestnut and our native chinquapin have been raised in considerable numbers. They quickly form handsome dwarf trees, bearing at an early age profuse crops of nuts of excellent quality, five or six times the size of those of the wild chinquapin parent, and ripening weeks before any other chestnuts. So far these trees show a very high degree of disease resistance. The second generation of hybrids, grown from self or chance pollinated nuts, appear quite as good as their parents, which is an important feature when the cost of propagation of nut

trees by budding and grafting is considered. Another line of breeding lies in the intercrossing of disease-resisting Japanese and Chinese varieties that are rapidly being imported into this country by the Office of Foreign Seed and Plant Introduction, and the selection of the best resulting forms. Four generations of cross-bred Japanese chestnuts of a very early bearing type, producing nuts when two or three years old, have already been grown, and the varietal characters appear to be well fixed. Some of the Chinese chestnuts are said to grow nearly 100 feet high in their home forests, and it may be possible by their use to replace in some measure our vanishing native chestnut stands, and perhaps develop superior varieties during the process of acclimatization.

**It would be extremely interesting to hear proof of this statement.—Editor.*

THE OHIO NURSERYMEN'S ASSOCIATION

The Ohio Nurserymen held their tenth annual meeting at the Deshler Hotel, Columbus, Ohio, on February 1st. The attendance was larger than at any previous meeting and more than the usual interest was manifested in the discussions. The feeling seemed to be one of optimism and that the nurserymen could expect from now on, an improvement in conditions and prices.

Officers of the association were re-elected as follows:—

President—T. J. Dinsmore, Troy, O.
Secretary—W. B. Cole, Painesville, O.
Treasurer—A. R. Pickett, Clyde, O.

A good spirit is developing among the nursery employees at Geneva and Newark.

The retail nurserymen have held various meetings for the purpose of getting acquainted. Two such meetings were recently held at Geneva and Newark.

The Independent Order of Yellow Dogs is growing accordingly; bowling matches are arranged and other interesting features.

The idea is worthy of emulation in other sections. It produces a feeling of intimacy and good fellowship which can be procured in no other way.



Obituary.

THEODORE SCOTT GRIESA

Theodore Scott Griesa, son of T. E. Griesa, nurseryman, Lawrence, Kansas, was accidentally shot February 24th.

Mr. Griesa was a senior in the University of Kansas, 24 years of age, a promising young man, with many friends. He was a sergeant in the National Guards and spent last summer on the border with his regiment.

The accident happened while on a duck hunting trip with a comrade to whom he was very much attached.

Nurserymen all over the country will sympathize with Mr. and Mrs. Griesa over the loss of their son under such sad circumstances.

AMERICAN ASSOCIATION OF NURSERYMEN

President—John Watson, Newark, N. Y.

Vice-President—Lloyd C. Stark, Louisiana, Mo.

Treasurer—Peter Youngers, Geneva, Neb.

Attorney and Secretary for the Association—Curtis Nye Smith, Boston, Mass.

Executive Committee—John Watson, Chairman, Newark, N. Y.; J. B. Pilkington, Portland, Oregon; John H. Dayton, Painesville, Ohio; Henry B. Chase, Chase, Alabama; Theodore J. Smith, Geneva, N. Y.; J. R. Mayhew, Waxahachie, Texas; E. S. Welch, Shenandoah, Iowa; Lloyd C. Stark, Louisiana, Missouri.

CHAIRMEN OF COMMITTEES

Arrangements—Thomas B. Meehan, Dresher, Pa.

Arbitration—W. C. Reed, Vincennes, Ind.

Exhibits—Albert F. Meehan, Dresher, Pa.

Program—J. R. Mayhew, Waxahachie, Texas.

Report of Proceedings—Curtis Nye Smith, Boston, Mass.

Nomenclature—J. Horace McFarland, Harrisburg, Pa.

Tariff—Irving Rouse, Rochester, N. Y.

Press—Ralph T. Olcott, Rochester, N. Y.

Telegraphic Code—R. C. Chase, Chase, Ala.

Hail Insurance—Frank A. Weber, Nursery, Mo.

Publicity—F. L. Atkins, Rutherford, N. J.

Distribution—M. R. Cashman, Owatonna, Minn.

Legislation—William Pitkin, Rochester, N. Y.

Transportation—Charles M. Sizemore, Louisiana, Mo.

Landscape—W. H. Wyman, North Abington, Mass.

STATE AND DISTRICT ASSOCIATIONS

American Nurserymen's Protective Association—President, Irving Rouse, Rochester, N. Y.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.

American Retail Nurserymen's Protective Association—President, H. W. Marshall, Arlington, Nebraska; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.

Association Oklahoma Nurserymen—President, P. W. Vaught, Holdenville, Okla.; secretary, Jim Parker, Tecumseh, Okla. Next meeting during week of State Fair at Oklahoma City, last of September or first of October.

California Association of Nurserymen—President, John S. Armstrong, Ontario. Secretary, H. W. Kruckeberg, Los Angeles, Cal.

Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.

Connecticut Nurseryman's Association—President, Walter E. Campbell, New Haven, Conn.; secretary, F. L. Thomas, Manchester, Conn.

Idaho Nurserymen's Association—President, Anton Diedricksen, Payette, Idaho; secretary, J. F. Litooy, Boise, Idaho. No definite time has been set for next meeting. Probably in July at Boise, Idaho.

Massachusetts Nurserymen's Association—President, G. Howard Frost, West Newton, Mass.; secretary, Winthrop H. Thurlow, West Newbury, Mass.

Mississippi Nurserymen's Association—President, Theodore Bechtel, Ocean Springs, Mississippi; Vice-President, S. W. Crowell, Roseacres, Mississippi; Sec'y-Treas., R. W. Harned, Agr. College.

National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.

New England Nurserymen's Association—President, Harlan P. Kelsey, Salem, Mass.; Secretary, Charles Adams, Springfield, Mass. Annual meeting held on the last Tuesday in February.

New Jersey Association of Nurserymen—President, Carl H. Flemer, Springfield, N. J. Secretary-Treas., A. F. Meisky, Elizabeth, N. J.

New York State Nurserymen's Association—President, E. S. Osborne, Rochester, N. Y.; secretary, H. B. Phillips, Rochester, New York. Next meeting September. Probably at Utica.

Ohio Nurserymen's Association—President, T. J. Dinsmore, Troy, Ohio.; secretary, W. B. Cole, Painesville, Ohio.

Oregon—Washington Association of Nurserymen—President, C. F. Breilhaupt, Richland, Wash.; secretary, C. A. Tonneson, Tacoma, Wash.

Pacific Coast Association of Nurserymen—President S. C. Miller, Milton, Oregon; secretary-treasurer, C. A. Tonneson, Tacoma, Wash. Place of next meeting to be decided later.

Pennsylvania Nurserymen's Association—President William Warner Harper, Philadelphia. Secretary, Henry T. Moon, Morrisville, Pa.

Southern Nurserymen's Association—President, Harry Nicholson, Winchester, Tenn.; secretary-treasurer, O. Joe Howard, Pomona, N. Carolina.

Tennessee Nurserymen's Association—President, A. I. Smith, Knoxville, Tenn.; secretary-treasurer, G. M. Bentley, Knoxville, Tenn.

Tennessee State Florists' Association—President, Karl P. Baum, Knoxville, Tenn.; secretary-treasurer, G. M. Bentley, Knoxville, Tenn.

Texas Nurserymen's Association—President, William B. Munson, Denison, Texas; secretary-treasurer, J. M. Ramsey, Austin, Texas.

Western Association of Nurserymen—President, Lloyd C. Stark, Louisiana, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

Damping-Off of Coniferous Seedlings

Damping-off of coniferous seedlings, in the opinion of forest pathologists of the U. S. Department of Agriculture, causes losses ordinarily considerably heavier than the nurseryman realizes. Very young seedlings decay and disappear so soon after infection that the number of dead seedlings visible at any one time is but a small part of the total loss. Furthermore, many of the seedlings are killed immediately after the seed sprouts and before the seedlings appear above the soil surface. Many failures hitherto attributed to poor germination, in the opinion of the specialists, are due in reality to the work of the damping-off parasites in the sprouting seed, underground. The high price of most evergreen seed, which ranges from a minimum of 50 cents per pound for western yellow pine to \$2 to \$4 per pound quoted for native spruces, and even \$5 to \$10 per pound for Norway pine, makes the loss of young seedlings a serious expense.

CONTROL MEASURES

To assist nurserymen in controlling damping off, the U. S. Department of Agriculture conducted extensive experiments in various sections of the country. The methods employed in these experiments and the success attending their use are reported fully in Professional Paper No. 453, *The Control of Damping-Off of Coniferous Seedlings*, by Carl Hartley, forest pathologist, and Roy G. Pierce, forest assistant, Bureau of Plant Industry.

Following is the summary of the 32-page bulletin devoted to this topic:

(1) By damping-off is meant the killing of very young seedlings by parasitic fungi. It is the most serious difficulty encountered in raising coniferous seedlings.

(2) To decrease losses from the disease excessive moisture and shade should be avoided. Caution must be used in following this recommendation or many seedlings may be killed by drought or by white-spot injury to the base of the stem. Damping-off can often be decreased by putting beds on very sandy soil. Seed should not be sown any thicker than necessary. It appears better to sow broadcast than in drills. Late fall sowing results in decreased losses at some nurseries and is worth trial. Proper attention to all of these measures will decrease the losses from damping-off, but at most nurseries they are not sufficient really to control the disease.

(3) The addition of lime, wood ashes, and in some cases nitrogenous fertilizers seems to increase damping-off. Soil alkalinity appears to favor the disease. No effect has been noted from green manures. The use of unrotted stable manure has had very bad results; properly rotted manures seem less objectionable. Tankage, charcoal, and cane sugar are the only nondisinfectant substances which have to date given any hope of disease control.

(4) Soil disinfection has so far proved the best method of combating damping-off. Of many methods tested, treatments with sulphuric acid, copper sulphate, zinc chlorid, and formaldehyde have proved the most satisfactory. The disinfectants, however, behave quite differently

at different nurseries. The acid has on the whole given the best results. Heat disinfection has been only partly effective. Disinfection by acid or copper sulphate is cheaper than by the other methods commonly recommended.

(5) In addition to decreasing damping-off after the seedlings come up, the chemical disinfectants above mentioned, when properly used, cause an increase in the apparent germination and are very helpful in controlling weeds. This latter effect alone at some nurseries pays the entire expense of the treatment. Sulphuric acid, has furthermore, at some places resulted in marked increases in the late season growth of pines.

(6) In some soils formaldehyde kills dormant seed, and the other three most satisfactory disinfectants at some nurseries kill the root tips of germinating seedlings. By proper precaution, all such injury may be prevented.

(7) The results obtained to date show that it is entirely possible and practicable to control damping-off by soil disinfection. Unfortunately, the varying behavior of disinfectants at different places renders it impossible to recommend any single treatment which will be everywhere successful.

THE MADAGASCAR BEAN

By S. L. Watkins, Pleasant Valley, California.

Some years back we obtained this bean from a seedsmen in Australia, with a recommendation that it was absolutely the most prolific bean ever grown.

The beans themselves are very large—a mottled purple and crimson splashed white.

Madagascar beans are especially adapted to warm climates, where they form large tuberous roots and live year after year. They are rank, vigorous growers, with heavy powerful foliage and singularly beautiful purple crimson and white flowers, borne in dense, long racemes, similar to wisteria blooms; these blooms are soon followed by enormous pods ten to eighteen inches in length, containing ten to twenty large beans. The amount of beans each plant will yield in a warm climate is simply marvelous, but these beans are more especially adapted for use as a shell bean, as they are deliciously rich and nutritious.

It is estimated that in a warm situation and good soil, two plants of this bean will supply a large family with this delicious and wholesome vegetable for nine months of the year. This bean can also be picked young, and the pods boiled whole as per the manner of string beans.

Madagascar beans thrive and bear well in cold climates, but the perennial roots would be killed out each winter, so that new seed would have to be sown each season. Again a one year plant will only yield about one third the amount of beans that a strong powerful two or three year perennial root would.

DELAYED IMPORTS

Nurserymen who are expecting nursery stock from Holland have received the following letter:—

COPY OF LETTER FROM

Department of State, Washington, March 21, 1917.

Gentlemen:—

The Department has received a cablegram dated March 17, 1917, from the American Charge' d'Affaires at The Hague, Netherlands, the substance of which is as follows:

"Office of Commercial Attache' is informed by Protective Association of Holland Nurserymen that it is said one hundred and twenty thousand dollars worth nursery stock for account consignees in United States held up at Rotterdam and that unless shipped within two weeks this stock will be badly injured. Association adds delay in shipment due to fact that Dutch vessels have thus far received permission from British government through Overseas Trust to sail for United States only in ballast. A further consignment of nursery stock to the value of two hundred and eighty thousand dollars sold to firms in the United States for delivery this season to become the property of firms in the United States who assume all risks in regard thereto upon delivery to the Holland America Line should be ready for shipment in the near future."

Among the firms who are interested in these shipments of nursery stock as transmitted by the Charge' d'Affaires at The Hague is the name of your firm.

I am, Gentlemen,

Your obedient servant,

For the Secretary of State;

(Signed) ALNEY A. ADLEE, *Second Assistant Secretary.*

EPIGAEA REPENS

The beautiful trailing evergreen *Epigaea repens*, known almost the country over as Trailing Arbutus, is rarely found on nursery lists, for the reason, chiefly, that it is a true wildling, disliking cultivation. Still, it can be cultivated, and here and there one finds plants of it domesticated.

Of the beauty of this evergreen there is no doubt, and then the fact of its flowers being among the very earliest of Spring adds much to its renown, young folks vying with each other in trying to be the first to find a spray of it in flower.

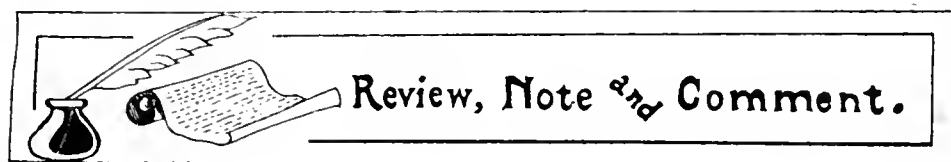
Epigae belongs to the ericaceous order of plants, an order which gives us so many of our most beautiful shrubs. In growth it lies close to the ground, spreading in all directions, forming large masses of green foliage. The flowers are white or pinkish white, varying somewhat in this respect, some plants having flowers of a markedly pink color. The plant is peculiar in being covered with a downy pubescence in all its parts.

The Trailing Arbutus is found from Newfoundland southward, and is abundant in many parts of Pennsyl-

vania and New Jersey, as well as in Kentucky and adjoining States.

There is no doubt it dislikes to be disturbed; hence the reason for its transplanting being so often a failure. It needs removal with a good ball of soil attached to its roots, and should be pruned back well at the same time. Then give it a place in a piece of woods, as nearly as possible like the situation from which it came, and tend it well for a long time after planting, and it should live, as numerous instances have proved.

What a sale there would be for plants of this little beauty had florists quantities of it established in pots and then had the plants in flower, for Easter let us say. They would bring any reasonable price, and buyers would be glad to get them.—*Joseph Meehan in the "Florists Exchange."*



"Between the decrease of saloons and the increase of munitions factories, the day laborer for nursery work is rapidly becoming extinct."

The above statement recently appeared in one of the leading Florist papers. It may be true but it is not nice reading. The implication that the average nursery laborer is a product of the saloon indicates a pretty low grade, and if this is so, why is it?

Nurserymen may not be able to hold labor against the inducements of the munition factory, but they certainly ought not to be satisfied with the saloon bum.

Our Mr. N. J. W. Eichholtz has left Holland on S. S. Noordam, January 13th to make a trip through U. S. in the interest of our firm.

His address will be during February, March, April, May and June, care of Maltus & Ware, 14 Stone street, New York City, N. Y.

At present we have a severe winter here which has stopped the export to America quite suddenly.

The Elm City Nursery Company, Woodmont Nurseries, Inc., inform us that they will now be able to proceed with the development of their extensive new nurseries at Woodmont, Conn., as the New Haven Railroad's plans, which would have taken all their nursery properties, have been so changed as to make this possible. The Nursery Company are to be congratulated, as the location at Woodmont is an exceptionally good one.

PYRAMIDAL ARBOR VITAE

500 Beautiful 4 to 5 feet plants.

Irish Juniper 5 to 6 feet.

SPECIAL OFFERING

JOHN A. YOUNG & SONS,

Greensboro Nurseries,

Greensboro, N. C.

Nurserymen depending upon nursery stock coming from Holland will be much disappointed this year. A few of the early shipments got through but practically none since the German submarine notice went into effect, and now it looks as though there would be endless litigation in connection with who is responsible for the loss of the stock that never left the country.

The Dutch nurserymen will not want to lose it after being delivered to the Transportation Companies, and the consignee will certainly not want to pay the bills not having received the stock, and the insurance companies will try to find an exempting clause under the conditions which prevail.

Mr. Lloyd C. Stark, Vice President of Stark Brothers Nurseries & Orchards Company, Louisiana, Mo., was one of a committee representing the Louisiana Commercial Club that met in Chicago with Speaker Champ Clark and officials of both the Burlington and Chicago and Alton railroads in connection with the effort to bring the \$11,000,000 government armor plant to Louisiana.

IF I WERE A NURSERYMAN

I would prepare a series of letters on trees, shrubs, and plants and the reasons for beautifying property;—the making of homes from mere houses.

I would call attention to the small outlay necessary to proper planting;—to the great advantage of planting to increase the value of property and to make it more saleable.

I would subscribe to Luce's Daily Landscape Architects Report and follow up each prospect. I also would get lists of owners of houses in the suburbs of large cities and send each one of my letters.

The first letter might show how the intrinsic value of property would be increased by proper planting. The second might deal with the making of homes from mere houses. The next might give the expense of planting different size lots and also suggest that the prospect send you the size, contour and shape of his lot for suggestions and prices of proper planting.

Many owners of city and suburban homes have the idea that shrubbery and gardens are an expensive luxury and so a little educational campaign on the part of the nurseryman will accomplish two results:—more business and more beautiful cities and suburbs.—*Adv.*

FOR SALE

OLD ESTABLISHED NURSERY FOR SALE

As I want to retire from business, I will sell besides the land, all nursery stock and implements. This nursery is located in the Northwest in one of the best business localities of this country. Address:

Z. W. S., Care "The National Nurseryman."

FOR SALE—Tree Moving Plant with several machines in good condition; all patents of same. Full particulars,

J. H. TROY,

New Rochelle

New York



The greatest time- and labor-savers for seeding and cultivating

Planet Jr. implements are quick and easy to operate—they economize time and effort, enable you to get bigger and better crops because they do more thorough and accurate work, and they outlast several ordinary implements. Fully guaranteed.

Planet Jr. Garden Implements

NO. 3 PLANET JR. HILL AND DRILL SEEDER is a popular seed-sower at a moderate price. Sows all garden seeds in hills and drills. A favorite with seedsmen, truckers, onion growers, and large gardeners. Sows accurately in a narrow line making wheel-hoe cultivation easy. We make 32 other styles of seed-drills and wheel-hoes—various prices.

NO. 8 PLANET JR. HORSE-HOE AND CULTIVATOR does a greater variety of work and does it more thoroughly than any other cultivator ever made. It has stronger, better construction. Its depth regulator and extra-long frame make it steady-running. Adaptable to deep or shallow cultivation and to different widths. 15 other styles of one-horse cultivators—various prices.

New 72-page Catalog Free

Illustrates and describes over 70 tools for farm and garden including Seeders, Wheel-Hoes, Horse-Hoes, Harrows, Orchard-, Beet-, and Pivot-Wheel Riding Cultivators. Write postal for it today!

S. L. ALLEN & CO.,
Box 1208 V, Philadelphia



WANTED

WANTED—Flowering shrubs in assortment, California Privet, Barberry Thunbergii and Ornamental Trees—20,000 in all. We want surplus lists of quality stock at fair prices for cash with order.

MOTHER EARTH LANDSCAPE COMPANY,
206 Rohms Ave., - Detroit, Mich.

WANTED

LANDSCAPE ARCHITECTS AND NURSEYMEN
LUCE'S DAILY LANDSCAPE ARCHITECTS SERVICE,
issued in the form of reports and delivered daily to subscribers, offers a method that will enable you to keep in touch with prospective clients and buyers of shrubbery and plants. Subscription \$5 a month. Sample reports upon request.

LUCE'S BUREAU,
No. 8 Bosworth St. - Boston, Massachusetts

WANTED—A permanent position as a superintendent for forestry or landscape planting. Have had college training and experience.

Address Z., care of The National Nurseryman

NURSEY SITUATION WANTED—As superintendent or foreman by man with life experience, thoroughly up-to-date in all Nursery methods, expert knowledge in fruits, ornamentals and various modes of propagation. Best references.

FOREMAN, care of National Nurseryman.

TRADE DIRECTORY

Price \$3.00, Postpaid

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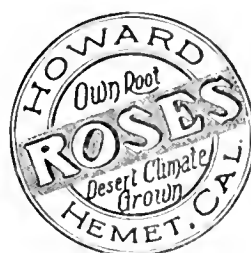
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SPIRAEA THUNBERGII. A beautiful lot of stocky
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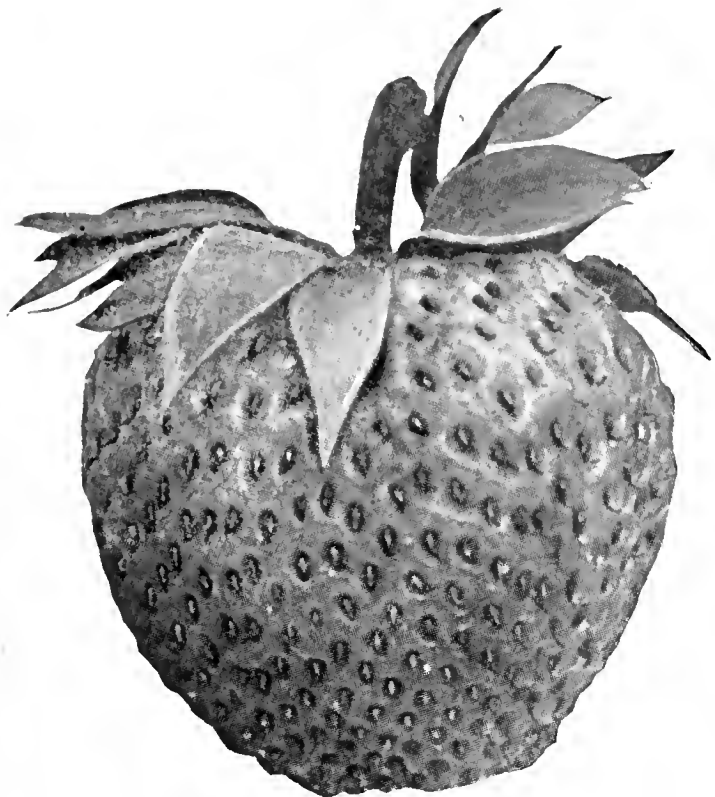
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Section of land must be cleared, and while quantities last
we will quote **ROCK BOTTOM PRICES**. Name items and
quantities that interest you.

500 White Spruce, 4-9 ft.	500 Common Hazel, 3-4 ft.
1000 Colorado Blue Spruce, 3-5 ft. (Type)	500 Clethra alnifolia, 2-3 ft.
1500 Norway Spruce, 3-6 ft.	2000 Lycium barbarum, 3 yrs.
1000 Fraser's Fir, 3-5 ft.	500 Prunus Pumila, 2-3 ft.
200 Balsam Fir, 6-8 ft.	1000 Spiraea salicifolia, 3-4 ft.
500 Jap. Yew, (Upright), 3 yrs.	500 Spiraea tomentosa, 2-3 ft.
500 Acer ginnale, 4-5 ft.	500 Viburnum lantana, 3-4 ft.
6000 Carolina Poplars, 5-9 ft.	500 Viburnum Bush Cran- berry, 3-4 ft.
5000 Lombardy Poplars, 5-7 ft.	500 Viburnum Common Snow- ball, 3-4 ft.
500 European Larch, 7-8 ft.	500 Symphoricarpos vulgaris, 2-3 ft.
300 Balsam Poplars, 7-8 ft.	2000 Bitter-Sweet (Celastrus), 3 yrs.
300 Golden Hop Trees, 3-4 ft.	2000 Trumpet Vine (Tecoma), 3 yrs.
1000 White Willows, 4 ft.	2000 Sweet Briers, 3 ft.
8000 Laurel, or Glass Willows, 3-5 ft.	500 Rose Hiawatha, 2 yrs.
500 Regal Willows (Regalis), 3-4 ft.	500 Achillea, The Pearl, 2 yrs.
500 Jap. Crab (P. Baccata), 4-5 ft.	2000 Shasta Daisies, 2 yrs.
2000 Golden-Barked Willows, 4 ft.	1000 White Iris Siberica, 2 yrs.
400 Bird Cherry (Padus), 3-4 ft.	1000 Blue Iris Siberica, 2 yrs.
500 Hornbeam, 3 ft.	500 Monarda (Balm), 2 yrs.
2000 Red-Barked Cornel, or Dogwood, 3-4 ft.	500 Astilbe Japonica, clumps.
2000 Jap. Quince, 2 ft.	10000 Vinca minor, 2 yrs.
2000 Scotch Broom, 2-3 ft.	500 Ajuga reptans, 2 yrs.
500 Broom (tinctoria), 2 ft.	500 Boltoni asteroides, 2 yrs.
1500 Bush Honeysuckles, 3-4 ft.	500 Hemerocallis, mixed, 2 yrs.
1000 Dwarf Syringa, 2 ft.	5000 Pachysandra, 2 yrs.
1000 Buckthorn, Catharticus, 3-4 ft.	500 Ranunculus (Buttercup) 2 yrs.
500 Buckthorn, frangula, 3 ft.	500 Sedum spect. (Variegated leaf), 2 yrs.
2000 Button Bush, 18-24 in.	3000 Hydrangea P. G. 18 to 24 inches, bushy and very strong.
1000 Spiraea opulifolia, 3-4 ft.	

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MAY 1917

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

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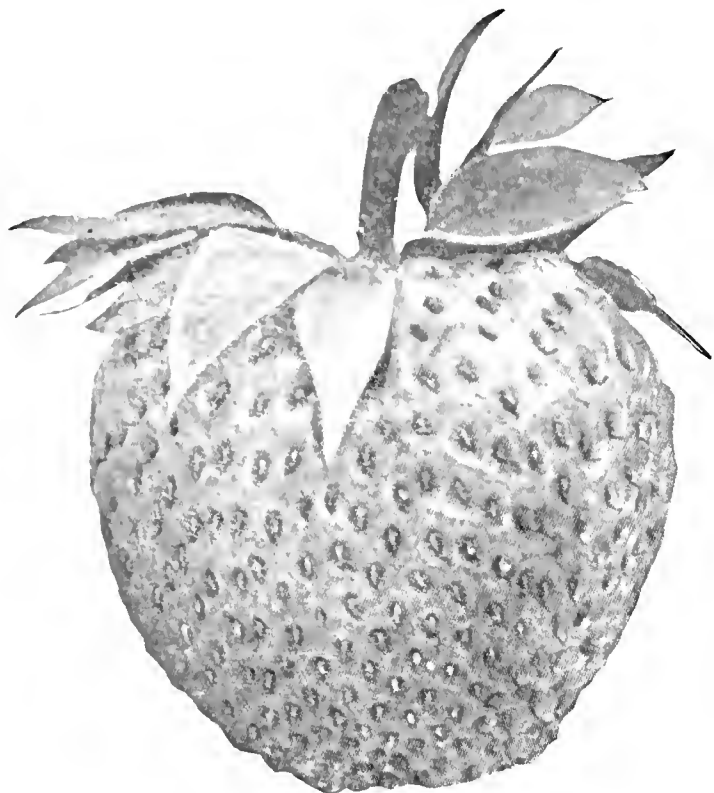


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We have a complete stock of the **EVERBEARERS** as well as all the **STANDARD** varieties despite the general shortage in plant crop this season.

Shipments made at any time from now until 1st of May either **TO YOU OR DIRECT TO YOUR CUSTOMERS**.

No order too large for us to handle with ease.

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All plants tied 25 to the bunch and each bunch labeled.

Our plants are hardy everywhere, strong, vigorous, healthy, with an unsurpassed root system.

NEW ILLUSTRATED BERRY BOOK AND WHOLESALE PRICE LIST NOW READY. SEND FOR YOUR COPY TODAY.

Let us fill your orders. You will enjoy the praise our plants will bring you.

The W. F. ALLEN CO., 100 Market Street, Salisbury, Maryland

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APPLES—Standard. Long list of varieties suitable for the home orchard. All strong, carefully selected stock on whole roots.

APPLES—Dwarf. A few good sorts to offer.

PEARS—Standard. Fine stock of two years trees as good as we have seen this year.

PEARS—Dwarf. Fair supply—largely Duchess.

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CATALPA BUNGEI—2 year heads, 5 ft. stems.

CATALPA SPECIOSA—8 to 10 feet and larger, straight bodies.

ELM, AMERICAN—Fine block of trees in grades between one and two inch caliper. All transplanted spring 1915.

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SYCAMORE (Oriental Plane)—Large trees in sizes 3 to 5 inches in caliper. Also 20,000 one year for lining out.

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ALTHEAS—Bush and tree shape, 3 to 4 feet.

BARBERRY THUNBERGI—All grades including 2 to 2½ ft.

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DEUTZIA, PRIDE OF ROCHESTER—Large stock 2 to 3 and 3 to 4 feet.

GOLDEN ELDER—3 to 4 and 4 to 5 ft., plants.

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PHILADELPHUS—Quantity of large plants at special low rate.

PRIVET—Large stock California Privet in three popular sizes—15 to 18 inches, 18 to 24 inches, and 2 to 3 feet. Strong grades.

SYMPHORICARPUS VULGARIS (Red Snowberry)—Will make low price on quantity of 2 to 3 ft. stock.

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EVERGREENS

Have been in great demand but a fair supply still on hand. Expect usual supply of Holland grown Conifers, Rhododendrons, Boxwood, Kalmias, etc.

Large stock of Mahonia Aquifolia, 18 to 24 inches.

PERENNIAL PLANTS

Hardy Chrysanthemums, Shasta Daisy, Delphinium Chinensis, Hibiscus, Hemerocalis, Iris German, Iris Japan, Tritoma Pfitzeri.

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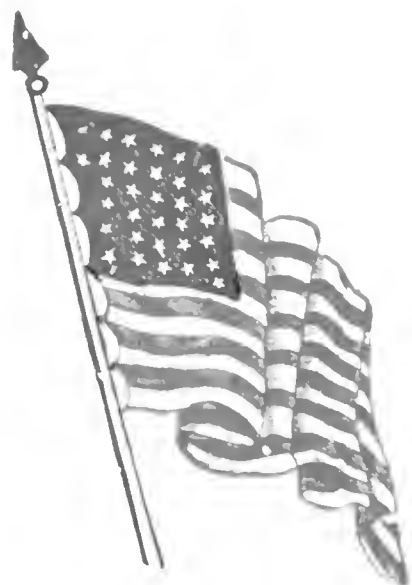
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THE ROSS BROTHERS SEED CO.

GRASS, FARM AND GARDEN SEEDS
ALFALFA SEED
POULTRY SUPPLIES - BEE SUPPLIES
POP CORN

WICHITA, KANSAS

March 26th-1917.

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WE SEND OUT AND WILL NOT BE IN ANY WAY RESPONSIBLE FOR THE CROP. IF THE PURCHASER DOES NOT ACCEPT THE GOODS ON THESE TERMS THEY ARE AT ONCE TO BE RETURNED

Mr. W. A. Garrabrant,
Kansas City, Mo.,

Dear Sir:-

We have been thinking about you a great deal
the past three weeks. Orders have been
coming in nicely from the Catalog made for
us and we are satisfied with our 1917 Catalog
as it is bringing us more orders per catalog
than any other we have gotten out heretofore.

This being our first year with you, you may
rest assured we are well pleased or would
not have written you on this subject.

Not being informed just what you are doing
for us, thought it would be a good time for
us to suggest that you begin revising our
1917 Book so that we may have better success
in 1918, if that is possible, and we still be-
lieve that you are capable of showing con-
siderable improvement in another Book that
you may make for us.

Wishing you continued success,

Yours very truly,

ROSS BROTHERS SEED CO

LEM*U

PAINESVILLE NURSERIES



We have one of the best stands of Tree Shaped Hydrangeas in the Country.

SPECIAL MENTION

STANDARD PEARS. A fine stock of choice varieties in which we have a surplus of Anjon, Bartlett and Clapp. Have **Dwarfs** in most varieties; Duchess in quantity. **PEACHES** are selling freely; would advise prompt placing of orders to ensure varieties. **GRAPES.** We have a particularly fine lot of Concords and Moore's Early and are well supplied with most sorts. **AMERICAN CHESTNUTS.** Can furnish large orders in first class stock, from 6 to 8 feet down to 2 to 3 feet.

ORNAMENTAL TREES. Among the kinds which we have yet in surplus are Cut-leaf Weeping Birch, the smaller grades of Horse Chestnut, European Linden, the balled, imported Magnolias, and European Sycamore 8 to 10 and 10 to 12 feet.

BARBERRY THUNBERGII, Buddleia, Hydrangea Pyramidalis 1½ to 2 and 2 to 3 feet, and a grand lot of 3 to 4 and 4 to 5 foot tree form Hydrangea. California Privet, Snowberries, Red and White; Spiraea Thunbergii.

HARDY PERENNIALS. A big lot of the best Hardy Phloxes, German Iris, Hollyhocks, Bleeding Heart, Yucca.

THE STORRS & HARRISON CO.

NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

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Did you get our

NEW CELLAR-COUNT LIST ?

As usual, there are some surprises in it,—some good things that we thought we were sold out of.

Maybe it offers just the stock that you have been vainly writing and telegraphing for all over the country.

Write for it today.

Stock is still dormant and in good condition.

Shipments the same day orders are received.



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GROWERS OF THE "PREFERRED STOCK"

NEWARK

NEW YORK

Heikes—Huntsville—Trees



To Meet Your Needs in
Peach, Apple, Cherry, Pear, Plum, Compass-Cherry-Plum, Apricot, Pecan Seedlings, Privets, Roses (budded and own-root), Abelia Grandiflora, Berberis Thun., Spirea V. H. and Reevesiana, Lonicera Fragrantissima and Halleana, Kudzu Vines, and Sundry Ornamentals.

In good assortment of standard varieties. All our own growing.
Send us your orders and inquiries.

ROSES, Budded H. P's. One of our Specialties.

We grow them by the hundred thousands.

HUNTSVILLE WHOLESALE NURSERIES

HUNTSVILLE, ALA.

FIFTIETH YEAR

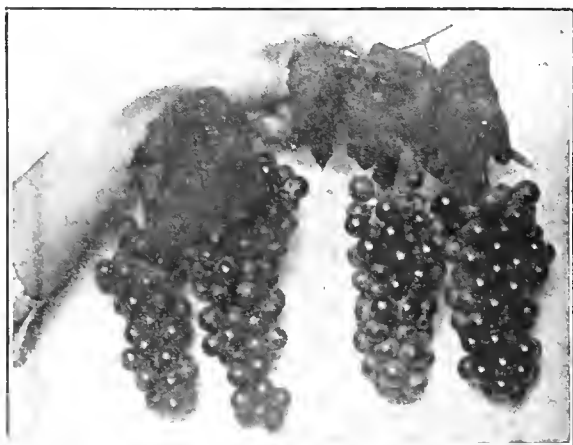
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FREDONIA, N. Y.

The longest established and best known growers of

Grape Vines

And the largest stock in the United States



CURRENTS and !GOOSEBERRIES

A fine stock of leading varieties. One and two years.

BLACKBERRIES

The largest and best stock of root-cutting plants in this country. All the best varieties. Snyder in great quantity. Our blackberry plants are as well furnished with fibrous roots as our well-known grape vines.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of
Own Root Roses

ORNAMENTAL TREES SHRUBS

BERRIES CLEMATIS

EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

70 Years

1000 Acres

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We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE



THE

North-Eastern Forestry Co.

CESHIRE

...Connecticut...

Speaking of Princeton

Answering the Country's call, this village of 5000 people is sending A Thousand Men (spell it with a Capital) to the front. A Hundred Men in the National Guard have joined the Colors; a Hundred more have been for months on the firing-line over yonder; Nine Hundred University Men are drilling for service under Old Glory. Going some isn't it, for a village of 5000?

And in the way of preparedness in keeping the business of the country going, a matter of as vital importance as carrying a musket, we are going to offer you Nurserymen next season about the prettiest lot of Ornamental Stock you ever laid eyes on—grown especially for you, too; for you who send out Agents and Catalogues, for we have neither; we are just Growers. And we don't want you to take our word for it, we want you to come and see it—any time. The stock covers 125 acres now, with as many more to plant later, and the assortment is already as extended as that offered by any American nursery. Ask any nurseryman who has visited our place or bought our stock what he thinks of it—and you will get a pleasant surprise, as the photographer says.

We are always glad to have letters or visits from Nurserymen who know and appreciate good stock properly grown.

Princeton Nurseries

Princeton - New Jersey

J. H. Skinner & Co.

Topeka, - Kansas



Apple Seedlings

Japan and French

Pear Seedlings

Forest Tree Seedlings

FRUITS TREES

SMALL FRUITS

Rhubarb, Myatt's Linnaeus, divided roots, pure stock; Shade Trees, including a fine lot of Soft Maple and White Elm.

CATALPA BUNGEI

6½ foot stems, straight and smooth

Bechtel's Double Flowering Crab

Ornamental Shrubs

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

Rawhide Brand of Shipping Tags and Tree Labels

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

ORNAMENTAL

TREES, SHRUBS, VINES, EVERGREENS
HARDY HERBACEOUS PLANTS

225 Acres

Entirely devoted to the growing of the
best quality of ornamental nursery stock.

WHOLESALE ONLY

We also grow the "unusual" things, you
cannot find elsewhere.

Small Trees and Shrubs for
Planting in Nursery Rows.

We shall have our usual supply for Spring
delivery. Catalogue ready January first.

RAFFIA HEADQUARTERS

Supply of our usual brands on hand at
all times.

Thomas B. Meehan Co.,

WHOLESALE NURSEYMEN

Dresher, - Penna.

SEEDLINGS & STOCK

We sell them, and good ones. We represent DELAUNAY, Angers. Some do not know yet what that means in quality and grading and packing, but they are coming. This season our business increased five hundred per cent. over that of last year; we shipped seedlings and stocks into 26 States. We will deliver more next season.

You can't dig more than you plant; your trees can't be better than your stocks; if you plant culls, you'll dig culls. A Wise Old Nurseryman said once "The best seedlings you can find aren't good enough." He meant it pays to plant the best. We don't claim Delaunay's are better than anybody-else's; we haven't seen them *all*. Folks in 26 States like 'em, though.

Price-list for 1917—1918 will be ready next month and we want to talk French Stocks with *you*, assuming that you, too, want to lay your money out where it will buy you something out of the ordinary in quality and grade and packing; and we want to talk importing expenses with you, too.

—o—

John Watson & Company

NEWARK, WAYNE COUNTY, NEW YORK

May first.

...Wanted Quick...

1,000,000	Assorted Blackberry root cuttings.
10,000	One year old Cuthbert Raspberry plants.
2,000	" " " Golden Queen Raspberry plants.
50,000	" " " Downing Gooseberry plants.
500,000	Senator Dunlap Strawberry plants.
1,000	One Year small Victoria Rhubarb.
25,000	" " Cherry Currant plants.
10,000	" " Black Naple Currant Plants.
5,000	" " White Currant plants.
100,000	Cherry Currant cuttings.
50,000	Black Naple Currant cuttings.
25,000	White Currant Cuttings.

We pay cash.

E. De Roo Mitting, General Manager

**H. J. & Alfred Mitting's
Nurseries**

MORRIS, ILL.

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa.

The Best Tree Digger on Earth



Used and Recommended by Leading
Nurserymen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

Stark Bros. Nursery & Orchards Co.
LOUISIANA, MO.

The Best In Nursery Products

We carry a full line of fruit and ornamental trees, evergreens, shrubs, etc. Send us a list of your wants.

A FEW SPECIALS

Oriental Planes from 1¼ to 3 inch caliper. A large stock of Sugar Maples, American Elms, Carolina Poplars, Lombardy Poplars, Beech grafted River's, and Fern-Leaved, Double Flowering Japan Cherries, Prunus Pissardi, Flowering Apples, Flowering Peaches, Magnolia Tripetela, Japan and American Judas, Japan Walnuts, American Arbor Vitae, Hemlock and Norway Spruce, Altheas, Forsythias, Philadelphus, Viburnum Plicatum, Weigela, Eva Rathke, etc.

10,000 Downing Gooseberries, 2 years No. 1.

**HOOPES BRO. & THOMAS
COMPANY**

THE WEST CHESTER NURSERIES

Established 1853 West Chester, Pa. Incorporated 1907



BERRY'S Wholesale Nursery

Small fruit plants in variety; rhubarb; horseradish; California Privet; Barberry Thunbergii; Hydrangea P. G.; Spirea Van Houghti; Peonies—home grown and imported; Imported Boxwood, etc.

Stock in storage. Can ship any time.

See list before placing your order.

P. D. BERRY,

Dayton

Ohio

FOR THE SPRING OF 1917

We offer our usual line of Apple, Plum, Cherry, Peach, Shade and Ornamentals.

WE CAN FURNISH IN LARGE QUANTITIES AND CAR LOTS

2 year Montmorency & Early Richmond Cherry
American Elm, 1¼ to 4 inch in caliper

Norway Maple, 8-10 ft. and 10-12 ft.

Soft Maple, 6-8 ft., 8-10 ft., 2½-3 in. caliper,
3-3½, 3½-4.

Catalpa Bungei, 1 and 2 year heads

C. M. Hobbs & Sons

Marion County

Bridgeport, - - Indiana

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Native Trees, Shrubs and Vines

At Special Prices
WHOLESALE ONLY

Sweet Hollow Nurseries

WEST HILLS, HUNTINGTON
Long Island, - New York

C. Van Kleef & Company

Nurserymen

BOSKOOP, - HOLLAND

Specialties: Kalmias, Andromedas, Ilex opaca, crenata, glabra, Azalea viscosa, nudiflora, calendulacea and arborescens, Cornus florida rubra, Vaccinium corymbosum and macrocarpa, etc., etc.

Representatives:—

John Van Kleef and John A. Driesprong

From 1 February until 1 June

Care Maltus & Ware,
14 STONE STREET - NEW YORK

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Spring 1917

GRAPE VINES—One and two years old. Varieties largely Moore's Early, Concord and Niagara. Also Scarlet or Crimson Clover Seed and Cow Peas. Free from weed seeds, all recleaned and guaranteed first class.

Correspondence solicited. Price list upon request.

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P. O. Address, Salisbury, Wicomico County, Md., R. F. D. 3
Long Distance Phone and Telegraph, Salisbury, Md.

The Framingham Nurseries

200 Acres
High Grade
Trees, Shrubs,
Evergreens,
Vines, Roses,
Etc.



Fine Stock
of
Rhododendrons
Kalmias
and
Andromedas

Send for Price List

W. B. WHITTIER & CO.

FRAMINGHAM, MASS.

We have a splendid stock of Grape Vines

and other small fruit plants for the Nursery trade, graded up to the highest standard and sure to please you.

Give us a trial order, send in your list now for quotations

WHELOCK & CONGDON

SUCCESSORS TO
WILLETT & WHELOCK

North Collins, - N. Y.

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Nurserymen

Fredonia, N. Y.

Growers of

Grape Vines, Gooseberries, Currants

One and two years old. Graded up to the highest standard. Our stock never looked better. Write us for catalog. Send us your list of wants. Our prices are right, our stock A No. 1.

We grow our Stock up to QUALITY and GRADE, not down to a price. Nevertheless, our prices are always in line, you can't afford to pay less, and there's no sense in paying more. If you are pleased with what you have been getting, you will be better pleased with our stock.

REMEMBER!

If its a hardy perennial or so called old fashion flower worth growing, we have it in one shape and another the year round. We have the largest stock in this country, all Made in America, and our prices—

Why say more here. Send for our Wholesale price list of varieties and benefit from the opportunities this affords you.

Our motto: "Maximum Quality, Minimum Cost."

Address, R. W. Clucas, Mgr.
Palisades Nurseries, Inc. Sparkill, N. Y.

You can save Time and Money

if you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

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64-66 Hanover Street
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Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

Leading Specialties for Spring 1917

Cherry, Two Year, extra fine, leading varieties
in car lots

Cherry, one year, 11-16 up and smaller grades
Our Blocks of Cherry are perhaps the largest
in the country

Std. & Dwf. Pear, Japan Plum, Compass Cherry
Peach, One Year, Car lots or less

Weeping Mulberry and Bungei Catalpa
Hardy Budded Pecans and English Walnuts

WE OFFER

Grape Vines, Currants and Gooseberries
in all varieties and grades

—also—

Grape and Currant Cuttings and Light
Grade of Vines for Lining Out
in Nursery Rows

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Specimens

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Abies Concolor (Concolor Fir)
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Juniperus Canadensis Aurea (Golden Dwarf Juniper)
Juniperus Counarti (Counarti Juniper)
Juniperus Elegants Lee (Lee's Golden Juniper)
Juniperus Glauca (Silver Cedar)
Juniperus Hibernica (Irish Juniper)
Juniperus Kosteri (Dwarf Spreading Juniper)
Juniperus Pfitzeriana (Pfitzer's Juniper)
Juniperus Procumbens (Jap. Trailing Juniper)
Juniperus Sabina (Savin Juniper)
Juniperus Sabina Prostrata (Creeping Juniper)
Juniperus Sabina Tamariscifolia (Gray Carpet Juniper)
Juniperus Schotti (Schotti's Juniper)
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Juniperus Suecica (Swedish Juniper)

Juniperus Virginiana (Red Cedar)
Juniperus Waukegan (Waukegan Trailing Juniper)
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Picea Alba (Am. White Spruce)
Picea Canadensis (Black Hill Spruce)
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Picea Excelsa Inverta (Weeping N. Spruce)
Picea Excelsa (Norway Spruce)
Picea Pungen Glauca (Colorado Blue Spruce)
Picea Pungen Kosteriana (Koster's Blue Spruce)
Pinus Austriaca (Austrian Pine)
Pinus Banksiana (Jack Pine)
Pinus Cembra (Swiss Stone Pine)
Pinus Flexilis (Limber Pine)
Pinus Mugho (Dwarf Mugho Pine)
Pinus Ponderosa (Bull Pine)
Pinus Resinosa (Red or Norway Pine)
Pinus Strobus (White Pine)
Pinus Sylvestris (Scotch Pine)
Pinus Tanyoshyo Globosa (Table Pine)
Taxus Baccata (English Yew)
Taxus Canadensis (Am. Yew)
Taxus Cuspidata (Japanese Yew)

Taxus Cuspidata Brevifolia (Dwarf Jap. Yew)
Taxus Repandens (Spreading Yew)
Thuya Biota Orientalis (Chinese Arb. Vitae)
Thuya Douglassi Pyramidalis (Douglas Pyr.)
Thuya Douglassi Aurea (Douglas Golden)
Thuya Occidentalis (Am. Arbor Vitae)
Thuya Rosenthali (Rosenthal's Arb. Vitae)
Thuya Warreana Siberica (Siberian Arb. Vitae)
Thuya Woodwardi (Woodward's Globe Arbor Vitae)
Thuya Lutea (Peabody Golden Arbor Vitae)
Thuya Ellwangeriana (Tom Thumb Arbor Vitae)
Thuya Hoveyi (Hovey's Golden Arbor Vitae)
Thuya Compacta (Compact Arbor Vitae)
Thuya (Little Gem)

Hill's Evergreens are supplied by us to many of the leading Nurserymen, Florists and Dealers throughout the country, where the highest standards are maintained, and where none but the highest quality would be accepted.

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Dundee is conveniently reached by train and trolley from Chicago, and trade visitors will be made welcome at any time. But if you cannot come, don't let that keep you from getting in touch with us by mail. We have the stock you need and are anxious to show just what we can do for you. Drop a line for Wholesale Catalog and Latest Bulletin.

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The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXV.

HATBORO, PENNA., MAY, 1917

No. 5

Entrance Plantings

THE subject of our illustration partakes somewhat of a base plant to a building but it is very evident the evergreens were selected and placed to set off the entrance.

Good taste, a thorough knowledge of the plants is clearly shown. It is dignified, attractive and harmonizes with the building and what is very important it has not been done for immediate effect without regard to the future.

nica or *Juniperus Sæcica*, Irish or Swedish Juniper and the two round plants on each side the walk, globe shaped box. Just back of them *Retinispora plumosa*, with *Retinispora obtusa nana* in the foreground of the groups.

The group of Rhododendrons in the corner relieves the stiffness and emphasizes the semi-formal nature of the planting at the entrance.

Many people object to covering fine brick or stone



A dignified and attractive planting of evergreens at an entrance

There is nothing messy or cluttered as is so often the case.

The two tall columnar plants on each side of steps are evidently *Thuja occidentalis* Arbor Vitæ.

The same effect could be secured by using *Juniperus Cannarti*, *Juniperus Virginiana Scholtei*.

The two smaller column plants are *Juniperus Hiber-*

work with vines, and not without good reason, as it seems foolish to pay for costly masonry and then have it covered with rank growing vines.

If the planter knows his business it is possible to select plants for every condition and purpose.

It will be noticed the *Euonymus radicans* has been used on each side of the arch to climb on the walls. This

will not grow too large and gives that softening touch to relieve the sharpness.

It will be noticed with the exception of the two globe box, placed each side of the path, the ground between the evergreens is kept cultivated. Too often it is attempted to plant them in the turf, but never with much satisfaction, the evergreens do not do so well, the grass is difficult to cut and unless it receives constant attention the result is a weedy effect.

Many people object to seeing the earth between plants grouped as in the illustration, but if it is kept nicely raked it certainly looks better than the weedy effect of grass in such a position.

Ground cover plants may be used if the bare earth is objected to. *Vinca minor* and *Pachysandra terminalis* are excellent for this purpose.

PRODUCTION

The biggest problem the retail nurseryman has to solve if he wishes to keep his business up to the mark or rather improving, is how to keep production up in quality and quantity.

During the planting season it is a continual struggle with emergencies to keep from taking the men away from the planting gangs and putting them to work on orders or planting for customers and production suffers accordingly.

The planting season and harvest are at the same time. If he neglects his harvest there is no money to carry on the planting, so he usually compromises and does as much as he can of both, but rarely finishes the season with a feeling of satisfaction that things ought to be handled differently. He looks at that block of stock that ought to have been transplanted and realizes while it was physically impossible to have done it he has lost out, and the stock has deteriorated accordingly. He looks at another block and knows if it had been done two weeks earlier it would have been 50 per cent better and so on all through the nursery.

Of course the ideal arrangement would be to have sufficient capital to be able to keep the production and distribution distinctly separate, but ideals are seldom practically possible.

There is, however, much to be gained in keeping the ideal always in mind and working towards it.

The time it takes to produce salable nursery stock varies from two to ten years and it is not easy to plan for the future with any exactness as there are so many unknown causes which may happen to upset them.

This, however, is all the more reason why as much scientific management should be brought into play as possible.

After the spring rush is over an inventory of stock is an essential to know what is on hand and enable you to lay plans for the future.

A propagating list and planting list with estimates of quantities.

Then an analysis to see how they can be accomplished. Some items can be propagated, others will have to be

purchased in small stock for growing on, others again purchased to keep the line catalogued full.

Such lists are invaluable and do much to save worry and loss of time.

Too often nurseries run to the jobbing house policy, buying whenever there is a bargain rather than according to a fixed plan of production. This produces the bane of the nursery business, surpluses that are sold at less than cost.

When the traveling salesman or visiting nurseryman calls, or special offers and lists come through the mail with a short list to refer to, it is decided almost automatically what is wanted, especially of the staples.

To keep abreast of the times there are always new or untried things to be considered as leaders or novelties. A good plan is to get a few each year to try out to see if they are adaptable to your particular nursery and trade.

Too often the nurseryman follows some advertiser's blind lead only to find out after he has spent a lot of time and money the particular plant was not suited to his trade or the other fellow had skimmed off all the cream from the specialty.

The nurseryman will invariably find out that he will make more money by backing his own judgment, when it comes to plants that he has to handle in his own nursery.

A plant may be all that could be desired, but if it cannot be handled profitably without an unreasonable amount of risk, it is better let alone saving the room, expense and energy for those things for which there is a steady demand.

FRENCH INSPECTION OF NURSERY PLANTS

[*Vice Consul Davis B. Lewis, St. Etienne, Feb. 26.*]

Interest in the prevention and control of plant diseases and inspection by scientific officials under State authority is increasing, according to figures made public in St. Etienne journals, and gives the number of horticultural establishments (nurseries) and vine growers who submitted to phytopathological inspections as increasing from 83 in 1914 to 103 in 1915 and 132 in 1916. The value of plants exported for these years to countries requiring certificates of inspection showed large increases notwithstanding the unusual conditions prevailing, the amounts reported being 1,464,986 francs in 1914, 2,466,440 francs in 1915, and 3,447,900 francs in 1916.

Nurserymen are reported as feeling assured of the continued growth of these figures by the guaranty of the French Government that buyers of other countries will have protection against dangerous parasites and diseases in plants imported from France.

The establishments submitting to control are divided into 14 districts and expert service of inspection is furnished by 26 entomologists and eryptogamists in charge of the director of the entomological station of Paris, the cost of the supervision being cared for by a fee of 25 francs per annum for each nursery and a charge of 1.55 francs per 1,000 plants exported. Efforts to greatly extend the service are being made by the Ministry of Agriculture.—*Daily Commerce Reports.*

The Presidents Message to Farmers and Horticulturists

The White House, Washington.

My Fellow Countrymen:

The entrance of our own beloved country into the grim and terrible war for democracy and human rights which has shaken the world creates so many problems of national life and action which call for immediate consideration and settlement that I hope you will permit me to address to you a few words of earnest counsel and appeal with regard to them.

We are rapidly putting our navy upon an effective war footing and are about to create and equip a great army, but these are the simplest parts of the great task to which we have addressed ourselves. There is not a single selfish element, so far as I can see, in the cause we are fighting for. We are fighting for what we believe and wish to be the rights of mankind and for the future peace and security of the world. To do this great thing worthily and successfully we must devote ourselves to the service without regard to profit or material advantage and with an energy and intelligence that will rise to the level of the enterprise itself. We must realize to the full how great the task is and how many things, how many kinds and elements of capacity and service and self-sacrifice, it involves.

These, then, are the things we must do, and do well, besides fighting,—the things without which mere fighting would be fruitless:

We must supply abundant food for ourselves and for our armies and our seamen not only, but also for a large part of the nations with whom we have now made common cause, in whose support and by whose sides we shall be fighting.

We must supply ships by the hundreds out of our shipyards to carry to the other side of the sea, submarines or no submarines, what will every day be needed there, and abundant materials out of our fields and our mines and our factories with which not only to clothe and equip our own forces on land and sea but also to clothe and support our people for whom the gallant fellows under arms can no longer work, to help clothe and equip the armies with which we are cooperating in Europe, and to keep the looms and manufacturies there in raw material; coal to keep the fires going in ships at sea and in the furnaces of hundreds of factories across the sea; steel out of which to make arms and ammunition both here and there; rails for worn-out railways back of the fighting fronts; locomotives and rolling stock to take the place of those every day going to pieces; mules, horses, cattle for labor and for military service; everything with which the people of England and France and Russia have usually supplied themselves but cannot now afford the men, the materials, or the machinery to make.

It is evident to every thinking man that our industries,

on the farms, in the shipyards, in the mines, in the factories, must be made more prolific and more efficient than ever and that they must be more economically managed and better adapted to the particular requirements of our task than they have been; and what I want to say is that the men and the women who devote their thought and their energy to these things will be serving the country and conducting the fight for peace and freedom just as truly and just as effectively as the men on the battlefield or in the trenches. The industrial forces of the country, men and women alike, will be a great national, a great international, Service Army,—a notable and honored host engaged in the service of the nation and the world, the efficient friends and saviors of free men everywhere. Thousands, nay, hundreds of thousands, of men otherwise liable to military service will of right and of necessity be excused from that service and assigned to the fundamental, sustaining work of the fields and factories and mines, and they will be as much part of the great patriotic forces of the nation as the men under fire.

I take the liberty, therefore, of addressing this word to the farmers of the country and to all who work on the farms: The supreme need of our own nation and of the nations with which we are cooperating is an abundance of supplies, and especially of food stuffs. The importance of an adequate food supply, especially for the present year, is superlative. Without abundant food, alike for the armies and the peoples now at war, the whole great enterprise upon which we have embarked will break down and fail. The world's food reserves are low. Not only during the present emergency but for some time after peace shall have come both our own people and a large proportion of the people of Europe must rely upon the harvests in America. Upon the farmers of this country, therefore, in large measure, rests the fate of the war and the fate of the nations. May the nation not count upon them to omit no step that will increase the production of their land or that will bring about the most effectual cooperation in the sale and distribution of their products? The time is short. It is of the most imperative importance that everything possible be done and done immediately to make sure of large harvests. I call upon young men and old alike and upon the able-bodied boys of the land to accept and act upon this duty,—to turn in hosts to the farms and make certain that no pains and no labor is lacking in this great matter.

I particularly appeal to the farmers of the South to plant abundant food-stuffs as well as cotton. They can show their patriotism in no better or more convincing way than by resisting the great temptation of the present price of cotton and helping, helping upon a great scale, to feed the nation and the peoples everywhere who are fighting for their liberties and for our own. The var-

ity of their crops will be the visible measure of their comprehension of their national duty.

The Government of the United States and the governments of the several States stand ready to cooperate. They will do everything possible to assist farmers in securing an adequate supply of seed, an adequate force of laborers when they are most needed, at harvest time, and the means of expediting shipments of fertilizers and farm machinery, as well as of the crops themselves when harvested. The course of trade shall be as unhampered as it is possible to make it and there shall be no unwarranted manipulation of the nation's food supply by those who handle it on its way to the consumer. This is our opportunity to demonstrate the efficiency of a great Democracy and we shall not fall short of it!

This let me say to the middlemen of every sort, whether they are handling our food stuffs or our raw materials of manufacture or the products of our mills and factories: The eyes of the country will be especially upon you. This is your opportunity for signal service, efficient and disinterested. The country expects you, as it expects all others, to forego unusual profits, to organize and expedite shipments of supplies of every kind, but especially of food, with an eye to the service you are rendering and in the spirit of those who enlist in the ranks, for their people, not for themselves. I shall confidently expect you to deserve and win the confidence of people of every sort and station.

To the men who run the railways of the country, whether they be managers or operative employees, let me say that the railways are the arteries of the nation's life and that upon them rest the immense responsibility of seeing to it that those arteries suffer no obstruction of any kind, no inefficiency or slackened power. To the merchant let me suggest the motto, "Small profits and quick service;" and to the shipbuilder the thought that the life of the war depends upon him. The food and the war supplies must be carried across the seas no matter how many ships are sent to the bottom. The places of those that go down must be supplied and supplied at once. To the miner let me say that he stands where the farmer does: the work of the world waits on him. If he slackens or fails, armies and statesmen are helpless. He also is enlisted in the great Service Army. The manufacturer does not need to be told, I hope, that the nation looks to him to speed and perfect every process; and I want only to remind his employees that their service is absolutely indispensable and is counted on by every man who loves the country and its liberties.

Let me suggest, also, that everyone who creates or cultivates a garden helps, and helps greatly, to solve the problem of the feeding of the nations; and that every housewife who practices strict economy puts herself in the ranks of those who serve the nation. This is the time for America to correct her unpardonable fault of wastefulness and extravagance. Let every man and every woman assume the duty of careful, provident use and expenditure as a public duty, as a dictate of patriotism which no one can now expect ever to be excused or forgiven for ignoring.

In the hope that this statement of the needs of the nation and of the world in this hour of supreme crisis

may stimulate those to whom it comes and to remind all who need reminder of the solemn duties of a time such as the world has never seen before, I beg that all editors and publishers everywhere will give as prominent publication and as wide circulation as possible to this appeal. I venture to suggest, also, to all advertising agencies that they would perhaps render a very substantial and timely service to the country if they would give it widespread repetition. And I hope that clergymen will not think the theme of it an unworthy or inappropriate subject of comment and homily from their pulpits.

The supreme test of the nation has come. We must all speak, act and serve together!

Woodrow Wilson.

THE SOLOMON ISLAND "GUADA" BEAN

By S. L. Watkins, Pleasant Valley, California.

This is a new species of bean, entirely different from any other known species. It was discovered in one of the south sea islands.

Since its discovery it is being extensively planted in Australia, New Zealand and the south sea islands.

It is a very rank, luxuriant grower, and attains a length or height of twenty to thirty feet. It is a deep rooted perennial, and when once established will grow many years. It is a continuous bearer in climates not too severe. The leaves are large and lobed, the long racemes of flowers are snowy white, fringed with filaments and highly scented.

This bean has enormous pods, three to six feet in length, and absolutely the very largest beans of anything in the bean family,—in fact there is only about one bean to a pod. In appearance the Guada bean resembles a long narrow cucumber. Single beans many times attain a weight of two pounds, so that a half bean or a single bean will furnish a big meal.

When over ripe the pods assume various colors, orange, red, green with white stripes.

With extreme large types of vegetables it is usual to expect coarse flesh and rank flavor, but such is not the case with the Guada bean.

It is best used as a shell bean, having a delightful flavor, suggestive of sugar peas. If taken before the young beans have quite set in the pods, sliced and cooked after the manner of string beans, the Guada bean makes a most acceptable dish.

This bean is recommended mostly for a warm climate, as there it will attain its greatest rank and development. It is an enormous cropper and each vine gives a great number of pounds of select beans. Sometimes as high as 50 pounds to a vine.

The Guada bean is a fine porch, trellis, and arbor vine, the large fragrant snow white blossoms, and the deep tinted various colored pods, render it a very attractive vine.

As a stock for improving the present types of beans by hybridizing it offers unlimited possibilities.

Rubus Ursinus and its Hybrids

By S. L. Watkins, Pleasant Valley, California.

Rubus ursinus, (Pacific Coast dewberries); This berry varies greatly in its wild state, there being thousands of variations or types, many are so sufficiently pronounced as to warrant separate botanical names.

This class of plants are all trailers. One of the large leaved and large caned sorts is the parent of the Aughinbaugh berry—in fact the Aughinbaugh is only a select type of the large leaved *Rubus ursinus*.

The Aughinbaugh berry is one of the parents of the Logan berry, and if I mistake not the Cuthbert raspberry the other parent.

Rubus ursinus is entirely different from any of the other dewberries throughout the world, and in quality it stands high, and also possesses extreme earliness. It is a plant of great vigor and vitality, and will thrive in very arid sections.

The *Rubus ursinus* species is perplexingly variable, and well marked characters seem to be associated with the different sexual forms. In their wild state a preponderance of pistillate sorts, or varieties prevail, and in their native haunts are very productive.

I would not class *Rubus ursinus* as a dewberry, but on the contrary as a distant berry fruit from all others.

There are many types of *Rubus ursinus* in its wild state whose foliage is identical to the Logan berry, the general plant growth, blooms, etc., also being identical. Many of these wild types produce fruit as large or larger than the Logan berry, some types have jet black fruit, some pink and some yellow and white. We have been engaged for some time in collecting and testing these wild varieties,—a great many of these latter however, are imperfect flowering sorts, and when removed from their native home, do not bear well unless in close proximity to some perfect flowering dewberry or raspberry, as strange to relate many of our common raspberries will fulfill the requirements for a perfect fertilizing agent for these imperfect flowering sorts.

Rubus ursinus has played a very important part in the originating of many new and select types of berries the past few years. Perhaps the greatest berry so far produced by using *Rubus ursinus* as a parent plant is the Logan berry.

We may state regarding the Logan berry, no berry introduced in the past 100 years has been of such great value to humanity and the world at large as the Logan berry. It is now cultivated all over the civilized world, and succeeds in almost all climes and lands. In Europe it is a great success, also Australia, New Zealand, South America, etc. In the colder portions of the United States it will do well, if the canes are protected in the winter time, and this is easily accomplished, as the vines are trailers and easily covered and uncovered.

The Logan berry is put to more uses than any other berry fruit known. In the Pacific North West it is

evaporated in large quantities and shipped to Alaska—also large quantities are used for making Logan berry juice, which is used extensively in the confectionery arts, and for making a cooling refreshing drink, also for seasoning and flavoring ice cream, cakes, etc. It is one of the best canning berries in the world, also for making pies, jams, jellies, short cakes for both winter and summer use. The demand for Logan berry fruit from the canneries all over the country is enormous.

The Logan berry is a very productive fruit, thriving well in all soils and climates, it is very early and a long continued fruiting vine. It is a very large berry, and the fruits average large from the earliest to the latest pickings,—the fruit is a deep reddish maroon color, with a sharp, brisk acid flavor which charms all. The Logan berry has a trailing prostrate habit of growth, and is propagated by tip plants and by cuttings.

The following select varieties of berry fruits all owe their origin wholly or in part to the *Rubus ursinus* species of berry. All these plants are worthy of extensive cultivation.

Meadhi Berry, a cross between the Japanese wineberry and the Logan berry,—the canes show the red spines of the wineberry, the fruits resemble the Logan berry, but are a brighter red, flavor is also sweeter, and the fruits are larger. These ripen the same time as the Logan berry. Productiveness the same as the Logan berry.

Waters Berry, a cross made by Henry Waters of this place, several years ago, between the Logan berry and the French Everbearing raspberry. Plants have the leaves of the Logan berry, and the upright growth of the French everbearing raspberry. The fruit which is purple, grows in dense clusters, large size, round in shape, a flavor decidedly unique, as it partakes of the sharp acid flavor of the Logan berry, and the sweet rich flavor of the French everbearing raspberry. Plants propagate from suckers like the French raspberry. Ripens in August and September, a very productive sort.

Lowberry, a berry produced in England—a cross between the Logan berry and an upright European blackberry, the fruit which is borne in clusters is similar to the Logan berry, and is about 1½ inches long, jet black, when ripe, juicy and of a rich sprightly agreeable flavor.

Hailsham Berry, said to be a cross between the Logan berry and a large red fruited autumn raspberry. This might be termed a sweet Logan berry as the flavor is rich and sweet, fruit large of a beautiful crimson color. Ripens in September and October. Fruit the same size and shape as the Logan berry.

Newberry, cross between the Logan berry and the Superlative raspberry, has the habit of the Logan berry, the canes grow ten to fifteen feet in length, bearing from 100 to 200 fruits, about two inches in length, of a fire red

color, and possessing a sweet rich flavor, totally distinct from other berries; ripens early.

Kings Acre Berry, this is a blackberry raspberry cross produced in England.—the blackberry of *Rubus ursinus* origin. This has produced a fruit of extreme earliness, jet black in color, rich aromatic flavor, berries large, conical in shape.

Del Norte Berry, a trailing vine, with light green leaves and light green wood.—bears large quantities of large conical snow white berries, of the sweetest and richest flavor imaginable. Ripens very early. Must be planted in close proximity to the Humboldt berry, to insure a perfect fertilization of its blossoms and to insure a big crop.

Humboldt berry, one of the best, has a trailing habit of growth, canes grow ten to fifteen feet in length, berries large and produced in luxuriant profusion, the long canes are almost solid masses of berries. I have counted 300 well ripened specimens of fruit on a length of cane only four feet long. Fruit is jet black, a rich sub-acid flavor, aromatic and delicious. Ripens the very earliest of all berries of this class.

Laxton Berry, produced in England. A Logan berry raspberry cross; unlike the Logan berry, this pulls off the stock like a raspberry, fruit, large, deep red, ripens early, plants grow eight to ten feet in length. Very prolific, this possesses a spicy nameless flavor.

Aughinbaugh Berry, in plant growth exactly resembles the Logan berry, fruit the same size, as the Logan berry, jet black, a delightful musky sprightly flavor, very prolific—a fine berry.

New Mammoth Berry, largest of all dewberries and blackberries, cross between *rubus ursinus* and the Texas Everbearing blackberry. Produced by Judge Logan, of Santa Cruz, California, the same man who originated the Logan berry. Fruit long, conical, many specimens over two inches in length, jet black, most deliciously flavored,—very productive, extremely early, ripens earlier than the Logan berry, great shipping and canning berry.

Corys Mammoth Thornless berry, similar to the new mammoth berry but canes are entirely thornless, which is a great feature, fruit also is larger.

Phenomenal berry, one of Burbank's blackberry raspberry hybrids, like the Logan berry in plant growth, fruit is earlier than Logan berry, a more showy red, better flavored and a larger berry than the Logan, and more prolific.

Skagit Chief, a stout vigorous grower, with extreme long canes,—a select wild type, very early, long thimble shaped berries, borne in luxuriant profusion, berries reddish black in color, flavor the very best, sprightly, rich and sweet.

Dansville, N. Y., March 19, 1917.

The National Nurseryman,
Dear Sirs:—

Please discontinue our advertisement in your magazine.

We wish to say that we have had very good results from ad. and will probably be with you again next year.

Yours very truly,

ZERFASS FARM.

THE CRIMSON FRUITED MOUNTAIN ASH

By S. L. Watkins, Pleasant Valley, California.

Pyrus Occidentalis, Var. High in the Sierra Nevada Mountains, California, in eastern California, there occurs a type or variety of the mountain ash that is worthy of extensive cultivation.

This tree attains a height of about 30 feet, with irregular spreading branches; the leaves resemble those of a gigantic rose bush; dark green in color in the summer and a beautiful orange red in autumn, but the crowning glory of this tree is its myriads of large fire red berries, which remain on the tree all winter.

No other berried tree that we know of has such bright attractive winter fruits. The berries look as if made of fire red glass. The size of these fruits is about one-half inch in diameter.

Well do I remember my first meeting with this wonder of the forest. I was on a seed collecting trip in the high Sierras, on the North Fork of the Cosumnes River, California, and rounding a bend in the river, there arose from a tangled thicket of *vaccinium* at the water's edge, a drooping flame colored mass of leaves and berries, perhaps 25 feet in height. The bright early morning sun, streaking through the dark fir forests, lit up this magnificent tree with its thousands of sparkling dew drops, its gorgeous orange red foliage and fire red berries; the gray towering cliffs of granite on either side of the river, the low rushing roar of the waters, the music of the winds through the dark forests, rendered this tree a fitting companion to its wild surroundings.

It takes kindly to cultivation, but must have damp soil and a partially shaded situation. Can be propagated by seed or layers.

BULLETINS OF INTEREST TO NURSERYMEN

Growing Cherries East of the Rocky Mountains. By H. P. Gould, Pomologist in Charge of Fruit-Production Investigations. Pp. 37, figs. 29. Contribution from the Bureau of Plant Industry. December, 1916. (Farmers' Bulletin 776).

The Pear Leaf-Worm. By R. L. Nougaret, Entomological Assistant, and W. M. Davidson and E. J. Newcomer, Scientific Assistants, Deciduous Fruit Insect Investigations. Pp. 24, pls. 2, figs. 4. Contribution from the Bureau of Entomology. (Professional Paper). December 11, 1916. (Department Bulletin 438). Price, 5 cents.

The Doek False-Worm; An Apple Pest. By E. J. Newcomer, Scientific Assistant, Deciduous Fruit Insect Investigations. Pp. 40, pls. 2, figs. 6. Contribution from the Bureau of Entomology. (Professional Paper). December 29, 1916. (Department Bulletin 265). Price, 10 cents.

The total area of the forest nurseries of the State of Pennsylvania, devoted to raising trees is 17 acres. They have grown about 26,000,000 trees, 22,000,000 of which have been planted on 13,000 acres of burned-over forest land.

Notes From Arnold Arboretum

PROSTRATE JUNIPERS. This general name is given to a number of low-growing Junipers with wide-spreading branches lying close to the ground and forming broad mats. For covering banks, the margins of ponds or beds of larger conifers they are useful and are much used in some parts of the country, although there is still a great deal of confusion in commercial nurseries about the identity and correct names of these Junipers.

THE PROSTRATE RED CEDAR. This is perhaps the handsomest of all these plants. On exposed parts of the wind-swept cliffs near Ogunquit and at Kennebunkport, Maine, this Juniper grows only about two feet high, with branches extending over a diameter of eighteen or twenty feet, their ends lying flat on the ground. At Kennebunkport, in a position not fully exposed to the wind, one of these plants has formed a short stem about two feet high from the summit of which start branches spreading horizontally and forming a broad head. Whether the dwarf habit of these Junipers is due to the exposed position where they grow or not cannot be determined until plants are raised from seeds produced by them, for it is possible such seedlings may assume the ordinary upright habit of this tree. The fact that such prostrate plants sometimes occur at a distance from the coast, as in Lexington, Massachusetts, indicates perhaps that the prostrate form has become fixed, as it is in the case of prostrate forms of some other Junipers. Dwarf forms of *Juniperus virginiana* are described in German books on trees under the name of *Juniperus virginiana repens* or *J. virginiana horizontalis*, but the Arboretum has no information about these plants and it is impossible to determine if they are similar to the prostrate plants of the Maine coast which possibly are still without a name. In this country the prostrate *Juniperus virginiana* is not known in cultivation, and in this Arboretum there are only a few small grafted plants of the tall-stemmed specimen at Kennebunkport. This Juniper well deserves the attention of the lovers of hardy conifers.

JUNIPERUS COMMUNIS, VAR. DEPRESSA. This is a dwarf form of the common Juniper and forms broad masses of stems ascending from a prostrate base and covered with linear, sharp-pointed, dark blue-green leaves marked on the upper surface by broad white bands. This dwarf Juniper is very common in the northeastern states on dry gravelly hills and in old pastures, sometimes almost entirely occupying the ground to the exclusion of other plants. In nurseries this plant is sometimes called *Juniperus canadensis* or *J. nana canadensis*. The erect-growing form, which is more common in Europe than in the United States, very rarely occurs in New England and sometimes grows on the lower slopes of the Appalachian Mountains as far south as North Carolina. On the hills in the neighborhood of the Delaware Water Gap in Pennsylvania this upright form seems more abundant than in other parts of the country and to be the prevailing Juniper. Erect forms of *J. communis*, known in gardens as the Swedish or Irish Junipers are often planted in the middle states but are not very satisfactory in Massa-

chusetts. There is a form of the variety *depressa* (var. *aurea*) with yellow-tipped branches which has been a popular garden plant in the United States for several years. The variety *moulana* is the dwarfiest of the prostrate forms of *J. communis*, rarely growing more than two feet high and forming dense mats of prostrate stems. From variety *depressa* it may also be distinguished by its shorter and broader incurved leaves. This little plant grows on the Atlantic coast from Maine to Newfoundland, on the Rocky Mountains, in Alaska, and through northern Asia and Europe. It is sometimes called *Juniperus nana*, *J. alpina* and *J. sibirica*. On the high mountains of Japan there is a form of *J. communis* (var. *nipponica*) with wide-spreading and ascending or often prostrate stems which is similar to the variety *moulana*. Nothing is known of the value of this Japanese variety in gardens here as it does not appear to have been introduced until Wilson sent seeds to the Arboretum two years ago from which only a single plant has yet appeared.

JUNIPERUS HORIZONTALIS. This is one of the handsomest of the prostrate Junipers and an excellent garden plant. It has procumbent and prostrate stems which often develop roots and sometimes extend over broad areas. The leaves are scale-like, acute, blue-green or steel-blue, and the fruits are bright blue and ripen at the end of the second season. This is a widely distributed plant from the coast of Maine to British Columbia, ranging south to Massachusetts, western New York, Illinois and Montana. It grows on sea cliffs, gravelly slopes, or in western New York in deep, often inundated swamps. For many years, until it was found to be distinct from the European Juniper, this plant was known as *Juniperus Sabina* var. *procumbens*. It has also been called *J. prostrata* and *J. repens*. There is a form of this Juniper (var. *Douglasii*) with steel blue foliage, turning purple in the autumn, which grows on the sand dunes of Lake Michigan and is known in gardens as the Waukegan Prostrate Juniper. There are large beds of *J. horizontalis* in the general Juniper Collection.

JUNIPERUS PROCUMBENS. This is the best known of the prostrate Junipers which Japan has sent to the gardens of the west. It is a plant with wide-spreading procumbent stems, blue-green, sharply pointed leaves marked on the upper surface by two white lines. The fruit is not known. This Juniper finds a place in nearly every Japanese garden, but it must be a rare and probably local plant in its distribution, as a wild plant was not seen by Wilson during his extended travels in Japan. It is said to have been introduced into Great Britain before the middle of the last century but was soon lost from European gardens until it was reintroduced in 1893. This Juniper is largely used as a garden plant in California where it is imported from Japan, and less commonly in the eastern states. It is perfectly hardy and well established in the Arboretum, and can be seen with the other Junipers. This Japanese Juniper is closely related to the prostrate Juniper of western China and the Himalaya *J. squamata*, a plant with awl-shaped, sharply

pointed leaves in clusters of three, and dark purple-black berries. Plants from western China can be seen in the Arboretum.

JUNIPERUS CHINENSIS, VAR. *SARGENTII*. This dwarf form of a wild tree of China and Japan appears to have been first collected by Professor Sargent near Mororan in southern Hokkaido in the autumn of 1892, and the plants raised from the seeds which he collected at that time are probably the only ones in cultivation. This Juniper forms a low dense mat of wide-spreading branches covered with small, dark green, scale-like leaves, mixed with pointed ones. It finds its most southern home on the high mountains of northern Hondo; it is more abundant in Hokkaido where it sometimes descends to the sea-level and ranges northward to Saghalin and the more southern Kurile Islands. In the Arboretum it is now the handsomest of the prostrate Junipers. It can be seen here to advantage on the Hemlock Hill Road opposite the Laurels where several plants form a large mass and show considerable seminal variation. There are also three large plants on the eastern slope of the knoll on which the general Juniper Collection is planted.

JUNIPERUS CONFERTA, which has been called *J. litoralis*, is also a Japanese species ranging northward from the southern island of Tanegashima to Saghalin and to the shores of the Sea of Okhotsk. The sand dunes of Hakodate Bay in southern Hokkaido are covered with the long prostrate stems of this plant which root freely as they grow and extend over broad areas. The leaves are thickly crowded, straight, sharp-pointed, concave, pale above and dark below. The fruit is three-seeded and ripens at the end of the second year. Although this Juniper has been known to botanists for more than fifty years it has never been cultivated until Wilson sent seeds from Japan to the Arboretum two years ago. From this seed a number of plants have been raised; they are doing well and there is reason to hope that this plant will soon be better known in eastern gardens. In northern Japan it grows on the sandy seashore with *Rosa rugosa*, which is such a good plant in the most exposed places on the New England coast, and it seems reasonable to expect that this Juniper may prove the most valuable plant which has yet been tried to hold the drifting sands of our eastern coast.

JUNIPERUS SABINA. The dwarfiest of all the prostrate Junipers in the Arboretum collection is a form of this European species with branchlets ascending only a few inches from prostrate stems and covered with dark blue-green scale-like leaves. The right name for this little plant is probably var. *cupressifolia*; another name is var. *nana*. A better known variety of *Juniperus Sabina* is the var. *tamariscifolia* from the mountains of central and southern Europe. This is a dwarf plant with procumbent or rarely ascending branches and needle-shaped, slightly incurved, dark green leaves marked on the upper surface with a white line.

NEW TREES AND PLANTS FOR AMERICA

Many Foreign Varieties Now Being Tested in Plant Introduction Gardens by Department of Agriculture

A wide variety of promising foreign plants are now being propagated and tested by the government in the

plant introduction gardens maintained by the U. S. Department of Agriculture in Florida, California, Washington, and Maryland.

These gardens may be called the "Ellis Islands" of the plant immigration service. In them the plant immigrants are carefully studied in order to make sure that they carry with them no disease, and only those which are known to be desirable additions are permitted to make a home in this country. The plants which have successfully passed this scrutiny are distributed to the State experiment stations and to thousands of experimenters and breeders throughout the country.

At the present time, says an article by P. H. Dorsett in the 1916 Year book of the Department, much attention is being bestowed upon recent importations from China. Among these are the jujube. This, it is said, may well prove commercially profitable in California and the semi-arid South and Southwest. When prepared with cane sugar, jujubes have as delicate a flavor as many dates. It is also a very good fresh fruit and has long been popular in China.

The Chinese pistache is another importation which has been suggested for use as an avenue tree. Thousands of young trees have been distributed to parks throughout the country for this purpose. One advantage of this tree is the great age to which it lives. For the production of nuts the variety of pistache found in central and western Asia is being tried. At present the entire supply of the nuts used in the coloring and flavoring of ice cream and candy comes from abroad, but it is said that there is no reason why this country should not grow its own supply. The Sacramento and San Joaquin valleys in California appear to be well suited to the industry.

Chinese persimmons and Chinese chestnuts are also being tested. It is believed that the Chinese chestnut may prove exceptionally valuable because of its power to resist the chestnut bark disease, which is doing so much damage among the native chestnuts. The persimmon, it is thought, might be grown commercially in California and in those sections in the South where the temperature does not fall much below zero. In China and Japan dried persimmons are a staple food and there seems to be no reason why they should not be eaten largely in the future in this country.

Still another importation is an early sweet cherry which has been introduced from Tanghsi, China. This may prove profitable to growers as an early cherry for the eastern markets.

A number of new vegetables, too, are now being tested in the plant introduction gardens. Among these are the chayote from tropical America. This vine produces pear-shaped fruit in abundance in the fall. They somewhat resemble in flavor summer squash or vegetable marrow, and may be used as a fresh vegetable throughout the winter.

The udo is a new salad plant from Japan that may be grown in practically every State. This is grown in much the same way as asparagus and may be cooked as well in the same way. A few plants of udo, says the article, should be in every home garden.

Early Wonder and McDonald Berry

By S. L. Watkins, Pleasant Valley, California.

No person who owns a farm or city garden should be without some plants of the early wonder berry and McDonald berry.

These two varieties of berries should be grown in close proximity to each other, as the McDonald berry is an imperfect flowering sort.

After many tests as to the most fitting plant to fertilize and perfect the fruit of the McDonald berry, we have decided upon the early wonder;—this latter blooms at the same time as the McDonald berry and their blossoms are heavily charged with pollen. There is considerable difference in the fruit of the two varieties, but both types are of a very superior order.

Both the McDonald and early wonder are on the dewberry—blackberry order of plants, but still not true dewberries or blackberries. Both commence to ripen early, and both are long season croppers.

It is very advisable when growing these two berries to have two rows of McDonald berry, and every third row of early wonder berry.

Set all plants six feet apart in the rows, and the rows seven feet apart.

Both varieties have a trailing prostrate habit of growth the first season, the second year they form dense upright bushes, and do not trail so much.

A very important point in their cultivation is this, about the middle of July, take a brush scythe and mow all the old as well as the new growth off, and when dry burn this. Then plow around the plants, and if too dry irrigate the ground so it can be plowed easily. After the ground is well plowed give a good irrigating, if you live in an irrigated section. In a few days these plants will start a new growth and be fairly good sized plants before fall. The great point in cutting these plants off is this: that the new crop of fruit the next spring will be double in size and double in yield to plants not so treated.

The early wonder berry is a much improved type of the Haupt berry and superior to it in every respect. So that a description of the Haupt berry is a good description of the early wonder berry. A Texas nurseryman has this to say of the Haupt berry: "The late Col. Haupt of Hayes Co., Texas, spent much time and money in collecting dewberries and blackberries. He got one probably from Wharton Co., Texas, that eclipses everything. It is certainly the most valuable variety of fruit of any kind. A few years ago we paid a fancy price for all the plants he would spare—we found them robust growers, never turning yellow, ripening early in April, and May, and best of all, they never have a faulty or poorly filled berry,—they are of good size, and of the very highest quality; they keep for a long time after turning black; they are productive beyond description.

Our foreman declared that the best vine had 40 quarts on it. It has those characteristics which denote it is a cross between a dewberry and a blackberry."

Regarding the McDonald berry Prof. L. R. Johnson says: "I feel that in the McDonald berry there has arisen the greatest of all the blackberry family. The McDonald is three weeks ahead of the El Dorado blackberry, equaling it in every other particular; it surpasses it in quality and size. The berries are very large, longish, and uniform in size. In quality it is equal to any variety of any season—the plants are extremely vigorous, bearing immense crops. One man harvested 500 bushels per acre. It stands the dry weather perfectly, and holds its foliage perfectly. It will hang on the bushes several days after ripening. Their earliness, large size, fine quality, command for it a high market price. It is as hardy as most blackberries, and will stand colder weather than early king, early harvest, Lucretia and Ward, and in fact will stand as much cold weather as the peach tree. The plants will trail during the first year, but become upright afterwards. For market, we know of no better berry that will pay as well. For home use it extends the season being at least a week earlier than the Lucretia dewberry."

In the California soil and climate both of these varieties will give a big crop in the fall if watered well, without any detriment to the spring crop.

The vines should not be trellised and tied to stakes. It has been found that the largest and sweetest berries grow near the ground.

In cultivating, the vines can be pushed aside, as they are quite strong and pliable, there is little danger of breaking them.

SOUTHERN CUT-OVER LAND ASSOCIATION, NEW ORLEANS, LA.

A tentative organization was formed April 13th at New Orleans, Louisiana, under the title of Southern Cut-Over Land Association, a body which it is proposed to incorporate immediately for the purpose of colonizing and developing one hundred million acres of cut over land throughout the southern states; the largest unused cultivable area on the American continent. The new organization will try to foster the live stock industry and reforestation of these lands.

A tentative plan is adopted to interest officials and commercial bodies in the principal southern cities, to demonstrate honestly and on a large scale to what purposes these lands are best adapted; to invite immigration and settlement by honest advertising and in other words to work the land rather than the public.

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The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 30th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., May 1917

NURSERY STOCK IN DEPARTMENT STORES

The attitude of the retail nurserymen towards the practice of selling nursery stock in the department stores, is not kindly; due perhaps to the impression that it is sold at less price than the retail nurseryman is in the habit of getting for it.

A visit to one of the leading department stores in Philadelphia on April 18th, showed an immense business being done at prices that compared very favorably with those of the retail nurseryman, in fact, the prices on the whole were higher, if the grade of stock was taken in consideration. Staple kinds of shrubs such as, Deutzia, Altheas, Spiraeas, Weigelas, Snowballs, Forsythias were selling at 50 cents each; they were a light 2 to 3 ft. grade. Peach trees $1\frac{1}{2}$ inch up at 35 cents; apples, pears and plums at 40 cents, Paeonia roots 25 and 35 cents.

Magnolias, roses, Rhododendrons, and other imported plants were a little lower than the nurseryman usually offers them for. On the whole the prices were very fair, according to the retail nurseryman's standards.

From what might be called the customer's viewpoint, the buyers were getting badly "stuck" with their purchases, for much of the stock being sent out would not live even with the most skilled handling. The bark was shriveled on the trees and bushes, the paeony roots were very dry, and to the practiced eye of a plantsman they were very low in vitality, due to poor handling. The salesmen who were taking the orders knew little or nothing about their goods, yet in spite of all this, the business seems to be growing.

However much we may deery the selling of nursery stock in dry goods stores, we cannot stop it by complaining about it. In popular centers there are a great numbers of people with small yards who will neither order from a catalogue or go out to a nursery, and these the department store is catering to, and the nursery interests should either work with the stores and put the handling

of goods on a better basis, or should find a means to serve the buying public in a better way on their own account. There seems to be no good reason why a market for the selling of the nurseryman's products cannot be established in cities during the planting season, where the stock could be handled in an expert manner, so as to give the buyers the worth of their money. It would be a no greater problem than the florist has already solved in the handling of cut flowers.

As bad as the stock is handled in the department stores, there is a marked improvement over previous years. It was noticed, all the shrubs were tied up neatly, each one having a little sphagnum around the roots, and this tied up in cheese cloth. It will only be a matter of time for the department stores to solve the problem, unless the retail nurseryman takes it out of their hands, by taking his goods to where the customers are, and giving them better value for their money.

THE BRUSH PILE

WILL NOT BE

A SIGN OF PATRIOTISM

America is at war, and every individual and trade or profession will be affected to a greater or less extent.

It will not be a profitable time for the nursery trade. At the outbreak of the war in Europe the slogan of the nurserymen there was—Business as usual, but however worthy the attempt this could not be. As the resources of the countries were called for, demand and labor condition changed, but it is to be sincerely hoped that peace will not be so long delayed as to put us in the same straits as our brother nurserymen in the Old Country. It is but a patriotic duty to consider the welfare of the whole Country rather than our individual profit. Everyone not called to actual participation of the land and sea forces should do his utmost to help increase and conserve food products. The nurserymen are close allies of the farmers and should become closer in such an emergency as the present, grow less nursery stock and more food crops suggests itself as sound policy for every nurseryman in the present emergency.

A brush pile will not be a patriotic celebration next year even if the demand is small.

Every bit of labor and land that can be spared from the necessities of the business should be put to use in producing food products.

GROWN IN AMERICA

What cannot be had can be done without, is a truism that has been impressed on many nurserymen the past spring, due to the non-arrival of a great part of the imports.

It is true much stock, such as Rhododendrons, Box, Azaleas and other choice evergreens and plants are sadly missed and it makes the question of "can they be raised in America?" a very pertinent one. The average nurseryman or plantsman thinks they could, but many doubt if they could be raised at a profit in competition with a foreign supply.

In considering the matter, we may as well be honest with ourselves and answer the question as to whether it is the low cost of production in Europe that makes the American unable to compete, or is it the lack of skilled

help. Americans are past masters in production where methods may be standardized so as to use unskilled or easily organized labor.

The florists of this country have proven this in the production of carnations and roses, and the nurserymen in the production of fruit trees and the development of orchards, but it took years to perfect the methods.

There is little reason to doubt that if the nurserymen of this country set themselves the task of growing the flowering plants and choice evergreens that are now almost exclusively imported, they will succeed, but it cannot be accomplished as quickly or in the same way that one would start manufacturing by machinery. It would take one or more generations to organize and develop the business to work up a stock and train the necessary help.

One has only to visit a nursery center like Boskoop, Holland, or Ghent, Belgium, to realize the care and skill required.

The plants we now import are largely those that can not be produced by the rough and ready methods and unskilled labor of the American nurseries, but require time, constant care and skill.

They are those plants that are least adaptable to quantity production by routine methods.

There is, however, not the least doubt but that the Bay Trees and Azaleas of Ghent and the Evergreens of Holland can be produced in the United States, and what is more should the American nurseryman set himself the task, like the florist in the production of roses, he would not follow old country models, but would set himself new ideals. We should have *Azalea Indica* in real bushes, instead of flat-headed dusters, evergreens that would show their own habits instead of looking as if they were all made in a mould. A wider and more intimate knowledge of plants would be the result and there would be less tendency to use plants as temporary decorations instead of beautiful living things.

NURSERYMEN'S CONVENTION, PHILADELPHIA, JUNE 27, 28, and 29.



*I'll get on the job early you bet,
To land the first order that's loose
The chap that comes late is a poor kind of skate,
And misses the worm with the juice.*

BOOK REVIEW

The New York State college of Agriculture of Cornell University, Ithaca, New York, A. R. Mann, Acting Director of Extension Service, has published two Bulletins on the Gladiolus. Bulletin No. 9, by Alvin C. Beal, gives the botany, history and evolution of the Gladiolus. Bulletin No. 10 by Alfred C. Hottes, the culture and hybridization.

They are thorough and comprehensive studies of the Gladiolus from every phase of the subject and should be of extreme value to specialists and lovers of this popular flower.

GARDEN GUIDE

Although there have been a great number of garden books published, the Garden Guide or The Amateur Gardener's Handbook should just fill a present need.

In the present stress of high cost of living, far more attention than ever before is being paid to the garden—in fact, 1917, it is claimed, is going to be a Garden Year beyond compare; at no previous time has the importance of the home vegetable garden been forced upon the attention of the people as is being done now.

Throughout its pages expert veteran gardeners tell the amateur in remarkably simple, easily understood language, how to plan, plant and maintain the home grounds, suburban garden, or city lot; how to grow good vegetables and fruit; how to raise beautiful flowers; how to take care of lawns, porch plants, window boxes, etc. The book gives the How, the When, and the Where—from the purchase of the proper tools to reaping the harvest, and 1001 other points. It is of interest to every man or woman interested in gardening, regardless of the amount of land at their disposal.

GARDEN GUIDE consists of 256 pages, and numerous illustrations, these selected not for picturesqueness, but as teaching examples, there being a reason for each and every picture presented. A charming cover in four colors depicts a flower garden and lawn view any garden lover would be proud of.

Published by A. T. De La Mare Co., Inc., 448 West 37th St., New York. Paper 50c.; cloth cover 75c.; post-paid.

THE AMERICAN ROSE ANNUAL

The American Rose Society has issued its year book for 1917. J. Horace McFarland, the editor and publisher, has certainly accomplished a good work. It brings information on the rose right up to the minute, not so much from the commercial rose grower's point of view, but rather that of the rose-loving amateur.

The aim of the articles and illustrations is to stimulate rose-growing in America. The former are written by such well-known rose-men as George C. Thomas, Jr., W. C. Egan, Dr. Robert Huey, C. D. Beagle, Theodore Wirth and others.

This year is started an accurate catalogue of roses of

American origin giving their parentage, originator and year as near as it could be ascertained.

The American Rose Society especially deserves the support of nurserymen and florists, as it is doing splendid work.

Send \$1.00 to B. Hammond, Secretary, Beacon, New York. This will entitle you to Associate Membership and a copy of the valuable work.

STANDARD CYCLOPEDIA OF HORTICULTURE

The sixth and final volume of the Standard Cyclopaedia of Horticulture by Prof. L. H. Bailey, or Bailey's Cyclopaedia as it is familiarly called, is being issued by the publishers The Macmillan Company, 55 Fifth Avenue, New York.

It would sound foolish to attempt to review this monumental work, apart from calling attention to its existence.

The old edition, The Cyclopaedia of American Horticulture, consisted of four volumes, 2016 pages, whereas the new edition "The Standard Cyclopaedia" consists of six volumes and 3639 pages.

Prof. Bailey has earned the gratitude of the American Horticultural World in compiling such a complete library of horticultural knowledge, in such an easily accessible form. No nursery office worthy of the name can afford to be without a set of these volumes. They are invaluable for catalogue work, cultural information, in fact a Court of Appeals and storehouse of up-to-date information in every phase of the business.

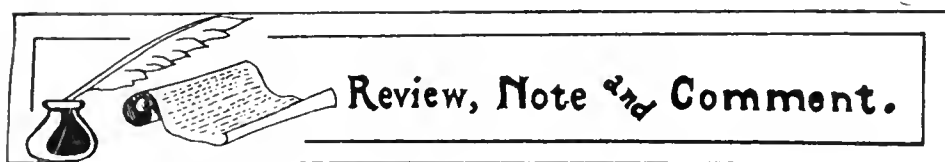
The price of this work is \$6.00 per volume.

SHADE TREES

The Massachusetts Agricultural Experiment Station, Amherst, Mass., has issued a bulletin of 264 pages, dealing with shade trees, covering characteristics, adaptation, diseases and care.

It is copiously illustrated and primarily intended to encourage the planting and care of street and roadside trees.

It is a book the nurseryman should read.



Newark, N. Y., April 16, 1917. Jackson & Perkins Co. has purchased a two-ton motor truck for use in handling their shipping and in getting laborers about from one farm to another.

At a dinner held at Shanley's New York, March 16th, 1917, rules were adopted by Kew Gardeners in America for a permanent association to meet at least once a year to promote mutual and friendly intercourse and keep in touch with each other. The officers of the Association are as follows: Montague Free, President; James MacPherson, Vice President; S. R. Candler, Secretary & Treasurer, P. O. Box 278, Southampton, N. Y.

According to Thomas J. Headlee, Ph. D., New Brunswick, N. J., in the Journal of Economic Entomology experiments with sulphur-arsenate of lead dust have proven very successful, being almost a complete protection from the ravages of the strawberry weevil.

The most successful tests were made on the farm of Mr. William Oeser, Cologne, N. J.

The varieties were Heritage and Champion.

The comparative yield is given at 2442 quarts per acre, increase due to treatment 1610.5 quarts per acre. Estimated cost of treatment \$12.00 per acre.

One part arsenate of lead to five parts of sulphur was found to be effective and more economical than one part arsenate of lead to one of sulphur.

The dusts were applied with a Tow-Lemons one man dust gun, May 6th, May 12th, and May 19th, insuring a complete coating of the buds during the critical period.



From the U.S.D. & A.

Dr. Beverly T. Galloway, Assistant to the Secretary of Agriculture, and in charge of the Department's emergency measures for dealing with the agricultural situation, issued the following statement today (April 13).

The following letter issued by the British Premier, David Lloyd George, while addressed to the people of England, conveys advice distinctly applicable to the United States and which should be heeded by every one who can do anything to produce food or save food from waste:

10, Downing Street, Whitehall, S. W.

March 5th, 1917.

We have now reached a crisis in the war when to ensure victory, the heroism of our armies at the Front must be backed by the self-sacrifice and tireless labour of everyone at home. To this end the production of each quarter of wheat and oats, and of each bushel of potatoes is of vital importance. The work of the next few weeks must decide the harvest of the year; and in the nation's interest I urge you, at whatever personal sacrifice, to overcome all obstacles, to throw your fullest energies into the work, and to influence and encourage all who assist you, so that every possible acre shall be sown.

The imperative demands of the war, have made it impossible to avoid calling up men fit for active service, even though skilled in farming. As far as possible this is being met by bringing on to the land men and women from other industries. They cannot be expected to do work equal to that of men expert in agriculture; but there is no time for delay and the Government is confident that Farmers will at once step forward and do all in their power to utilise their services to the best advantage.

The farmers of this country can defeat the German submarine and when they do so they destroy the last hope of the Prussian.

Yours faithfully,

(Signed) D. LLOYD GEORGE.

Philadelphia

The Convention City of the American Association of Nurserymen.



Christ Church.

The illustration above is that of Christ P. E. Church, Second street, above Market, in Philadelphia. No other building devoted to worship in America is more widely known than this one, with the possible exception of another Philadelphia Church,—the *Gloria Dei*, or Old Swedes' Church at Second and Swanson streets. Christ Church was designed by Sir Christopher Wren, was built in the early days of the Colony and has been in continuous use for worship ever since. The pew occupied by George Washington while living in Philadelphia as President of the United States is here. Although once in the heart of the exclusive residential section of the city, the historic church now stands amid the marts of trade. However services are still conducted in it and it has a large congregation.

Because of its historic associations, great care is taken by the City authorities to protect the Church from damage by fire. The building has been well preserved and is one of the finest examples of church architecture of the early days in the city.

Founded in 1682 by the great Quaker, William Penn, as a city where religious freedom might obtain, Philadelphia grew rapidly and a large number of churches were erected. But the main feature of the city's growth has been in the line of homes and "the City of Brotherly Love" now boasts also of being the "City of Homes." Development in this direction has kept pace with the commercial and manufacturing growth of Philadelphia

and the slogan "The World's Greatest Workshop" has come to be recognized as the fitting and proper designation for the Birthplace of the Nation.

APPLE SPRAY SCHEDULE

Boiled down, the information on apple spraying reads like this:

Before buds start—dormant spray: lime-sulfur 1 to 8, for scale and blister mite.

When leaves of blossom buds are out $\frac{1}{4}$ to $\frac{1}{2}$ inch—delayed dormant spray: lime-sulfur 1 to 8 for scale and blister mite; "black leaf 40" $\frac{3}{4}$ pt. in 100 gal. for aphids; arsenate of lead 5-6 pounds in 100 gallons for leaf roller and case bearers. (If this spray is applied it will not be necessary to make the "dormant" application).

When blossoms show pink—blossom-pink spray: lime sulfur 1 to 40 for scab; arsenate of lead 5-6 pounds in 100 gallons for bud moth, case bearers, etc.; "black leaf 40" 1 pint in 100 gallons for dark apple red-bug.

When the last of the petals are falling—calyx spray. lime-sulfur 1 to 40 for scab; arsenate of lead 5-6 pounds in 100 gallons for codling moth; "black leaf 40" 1 pint in 100 gallons for bright apple red-bug.

Later sprays to be determined by weather conditions and control of scab: lime-sulfur 1 to 40 for scab; arsenate of lead 5-6 pounds in 100 gallons for codling moth and other caterpillars.

Copies of a card containing this information, with pictures of the buds and blossoms to show graphically just when to spray have been sent to a comprehensive list of apple growers in New York, but anyone who wants a card to tack on the inside cover of his spray-rig tool-box can secure one by writing to the state college of agriculture at Ithaca.—*From the New York State College of Agriculture at Cornell University.*

THE NEW ZEALAND MOUNTAIN LILY

S. L. Watkins, Pleasant Valley, California.

Ranunculus Lyalli, (The Shepherds or Mountain Lily). This is the largest and one of the most singularly beautiful ranunculus in the world. The most graphic description would fail to convey any adequate idea of its marvelous beauty; the leaves are of enormous size, a deep glossy green; the massive flowers appear on tall stems, and are over four inches in diameter, with beautiful waxy white petals and a yellow disc; the white of the petals being of the most intense snowy whiteness, and the yellow the most intense glistening golden yellow; this plant is a luxuriant bloomer, and its blooming propensities can be continued greatly by occasional irrigations in dry sections. It is highly fragrant.

This plant has a bold, striking tropical appearance, and stands three to four feet in height in its blooming season, with a spread of leaves of from three to four feet. It is indigenous to the high mountains of New Zealand, and is perfectly hardy in most all climates.

AMERICAN ASSOCIATION OF NURSERYMEN

President—John Watson, Newark, N. Y.
Vice-President—Lloyd C. Stark, Louisiana, Mo.
Treasurer—Peter Youngers, Geneva, Neb.
Attorney and Secretary for the Association—Curtis Nye Smith, Boston, Mass.
Executive Committee—John Watson, Chairman, Newark, N. Y.; J. B. Pilkington, Portland, Oregon; John H. Dayton, Painesville, Ohio; Henry B. Chase, Chase, Alabama; Theodore J. Smith, Geneva, N. Y.; J. R. Mayhew, Waxahachie, Texas; E. S. Welch, Shenandoah, Iowa; Lloyd C. Stark, Louisiana, Missouri.

CHAIRMEN OF COMMITTEES

Arrangements—Thomas B. Meehan, Dresher, Pa.
Arbitration—W. C. Reed, Vincennes, Ind.
Exhibits—Albert F. Meehan, Dresher, Pa.
Program—J. R. Mayhew, Waxahachie, Texas.
Report of Proceedings—Curtis Nye Smith, Boston, Mass.
Nomenclature—J. Horace McFarland, Harrisburg, Pa.
Tariff—Irving Rouse, Rochester, N. Y.
Press—Ralph T. Olcott, Rochester, N. Y.
Telegraphic Code—R. C. Chase, Chase, Ala.
Hail Insurance—Frank A. Weber, Nursery, Mo.
Publicity—F. L. Atkins, Rutherford, N. J.
Distribution—M. R. Cashman, Owatonna, Minn.
Legislation—William Pitkin, Rochester, N. Y.
Transportation—Charles M. Sizemore, Louisiana, Mo.
Landscape—W. H. Wyman, North Abington, Mass.

STATE AND DISTRICT ASSOCIATIONS

American Nurserymen's Protective Association—President, Irving Rouse, Rochester, N. Y.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.
American Retail Nurserymen's Protective Association—President, H. W. Marshall, Arlington, Nebraska; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.
Association Oklahoma Nurserymen—President, P. W. Vaught, Holdenville, Okla.; secretary, Jim Parker, Tecumseh, Okla. Next meeting during week of State Fair at Oklahoma City, last of September or first of October.
California Association of Nurserymen—President, John S. Armstrong, Ontario. Secretary, H. W. Kruckeberg, Los Angeles, Cal.
Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.
Connecticut Nurseryman's Association—President, Walter E. Campbell, New Haven, Conn.; secretary, F. L. Thomas, Manchester, Conn.
Idaho Nurserymen's Association—President, Anton Diedricksen, Payette, Idaho; secretary, J. F. Litooy, Boise, Idaho. No definite time has been set for next meeting. Probably in July at Boise, Idaho.
Massachusetts Nurserymen's Association—President, G. Howard Frost, West Newton, Mass.; secretary, Winthrop H. Thurlow, West Newbury, Mass.
Mississippi Nurserymen's Association—President, Theodore Bechtel, Ocean Springs, Mississippi; Vice-President, S. W. Crowell, Roseacres, Mississippi; Sec'y-Treas., R. W. Harned, Agr. College.
National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.
New England Nurserymen's Association—President, Harlan P. Kelsey, Salem, Mass.; Secretary, Charles Adams, Springfield, Mass. Annual meeting held on the last Tuesday in February.
New Jersey Association of Nurserymen—President, Carl H. Flemer, Springfield, N. J. Secretary-Treas., A. F. Meisky, Elizabeth, N. J.
New York State Nurserymen's Association—President, E. S. Osborne, Rochester, N. Y.; secretary, H. B. Phillips, Rochester, New York. Next meeting September. Probably at Utica.
Ohio Nurserymen's Association—President, T. J. Dinsmore, Troy, Ohio; secretary, W. B. Cole, Painesville, Ohio.
Oregon—Washington Association of Nurserymen—President, C. F. Breilhaupt, Richland, Wash.; secretary, C. A. Tonneson, Tacoma, Wash.
Pacific Coast Association of Nurserymen—President S. C. Miller, Milton, Oregon; secretary-treasurer, C. A. Tonneson, Tacoma, Wash. Place of next meeting to be decided later.
Pennsylvania Nurserymen's Association—President William Warner Harper, Philadelphia. Secretary, Henry T. Moon, Morrisville, Pa.
Southern Nurserymen's Association—President, Harry Nicholson, Winchester, Tenn.; secretary-treasurer, O. Joe Howard, Pomona, N. Carolina.
Tennessee Nurserymen's Association—President, A. I. Smith, Knoxville, Tenn.; secretary-treasurer, G. M. Bentley, Knoxville, Tenn.
Tennessee State Florists' Association—President, Karl P. Baum, Knoxville, Tenn.; secretary-treasurer, G. M. Bentley, Knoxville, Tenn.
Texas Nurserymen's Association—President, William B. Munson, Denison, Texas; secretary-treasurer, J. M. Ramsey, Austin, Texas.
Western Association of Nurserymen—President, Lloyd C. Stark, Louisiana, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.



Obituary.

GEORGE MASSEE.

George Massee, an eminent botanist and mycologist died at his home in Kent, England, February 17th, in his 67th year. Mr. Massee was for a number of years connected with the Kew Herbarium and was widely known in horticultural circles from his work in connection with plant diseases. His text book on this subject is considered an authority both in England and this country.

THE DODECATHEONS OF THE PACIFIC COAST

By S. L. Watkins, Pleasant Valley, California.

These are curious looking plants, which when once seen are not soon to be forgotten. They are like small cyclamens, and run through various shades of color of pure white, yellow, deep red, purple, rose and many intermediate shades and blendings of color. They all have a bright yellow circle in the middle, at the mouth of the corolla.

They are the most beautiful of all our spring flowering plants, while the blossoms have a delightful fragrance entirely their own.

In California they commence growing with the advent of our first early rains, and by February and March, in all the low altitudes, they are in full bloom, remaining so for about six weeks.

There are many different types of dodecatheons, inhabiting various altitudes, and some of the alpine forms bloom as late as the middle of July, which would be early spring in alpine altitudes, 10,000 to 12,000 feet above sea level.

After blooming these plants soon die down, and in the low altitudes the ground gets baked, very hard and dry, and these roots get thoroughly dried out, and remain so until the coming of the winter rains.

The roots of this plant when in a dried condition, can be shipped in this state any distance, and anywhere during the summer.

They make fine potted plants, and can soon be forced to bloom, any time during the winter. Several colors can be placed in a pot, making a striking and unique display of winter bloom.

Dodecatheons in their native state naturally select a partially shaded situation. All they require is open, well drained soil, fairly rich and moist, and somewhat shaded during part of the day. Where the exposure is too sunny the flowers are of short duration.

The dodecatheons are hardy herbaceous plants and will succeed in almost any climate.

Dodecatheon is a Greek word, meaning "the twelve gods." This plant is variously known as shooting stars, American cow slip, Mad violets, etc.

These plants are splendidly adapted to all kinds of rock work, and general landscape work. They are all great bloomers, producing an abundance of cyclamen

like flowers. Some of the choicest types are:

Dodecatheon Clevelandi, a charming species, flowers white, pink tinted, Southern California.

D. Hendersoni, stout plant, many stems of rose purple and deep crimson flowers, Sierra Nevada Mountains.

D. patulum, bright lemon yellow, sometimes straw color, Central California.

D. patulum var., pale cream colored flowers, sometimes purple tinted, Central California, valleys.

D. Walkinsoni, bright yellow, variously shaded white and pink, central California, valleys.

D. Jeffreyi, dark rose colored flowers. Sierra Nevada Mountains.

D. ellipticum, flowers from deep lilac purple to pinkish. Northern California.

D. media, white to pale rose. Central California.

D. viviparum, large and handsome purple red flowers, sub alpine on Mt. Rainier, Washington.

D. Dentatum, snow white flowers. British Columbia.

D. frigidum, large purple flowers, shores of Behring Sea.

D. alpinum var., found in Alpine County, California, at 10,000 feet above sea level; forms large clumps two or more feet across, with hundreds of deep rose pink flowers.

The Moth Vine

S. L. Watkins, Pleasant Valley, California.

Physianthus albens. Our attention was first directed to this remarkable plant, by a New Zealand friend. There it is known as Arranga, New Zealand Death Plant, Cruel vine, etc.

This vine is a shrubby climber of from ten to fifteen feet in growth and a most rampant vigorous grower; it bears great numbers of large waxy snow white blossoms of intense fragrance. The shape of the blossoms would be termed, hypocateriform, that is a long slender tube and a flat limb, as for example, a blossom of the phlox, which is upon a much smaller scale, than the blossom of the physianthus, but this will give the idea. This tubular part of the blossom exudes a gummy substance, and this with the peculiar fragrance of the flowers attract the moths and insects to their deaths.

Physianthus years ago was referred to Araujai, but it is known to the trade as Physianthus and Schubertia. Physianthus is a genus of thirteen species, indigenous to the Andes mountains of South America.

These plants thrive and do well in all soils, but seed should be started in the house in early spring, and later transplanted to the open ground, where they will grow rapidly and soon bloom profusely.

The blooms closely resemble those of the stephanotis, but are considerably larger.

These plants are best propagated by cuttings, which may be made in late autumn, and from well ripened wood; these cuttings should be potted or planted in earth at once. As plants from seeds vary greatly in growth, time of blooming, size of bloom, etc., it is readily apparent that the propagation by cuttings of the best sorts is the only way to secure the best plants. Again the cuttings can be grown in a greenhouse or warm room and be made to advance in growth as much as possible, so as to hasten their blooming season in the spring.

Seed is produced very freely and germinates readily, within a few days after being planted.

As this plant is such a great death trap to moths, flies, etc., and especially to the codlin moth, we believe it to be the greatest exterminator to this pest we have ever come across. Single plants during a season will destroy from

3000 to 5000 codlin moths each in apple and pear growing localities.

The codlin moth as all fruit growers know destroys more apples and pears than all other pests put together.

Single plants of this vine have caught from 300 to 500 codlin moths per night when these insects are most abundant. Just imagine the amount of damage 500 codlin moths would do in one night to a fruit crop; they could visit thousands of blossoms and immature fruits and lay eggs for the future worm to destroy all fruits in their way.

Many and various have been the devices used and contrived to kill off this pest, but none so far have been successful in completely exterminating the codlin moth.

The Physianthus is hardy in England and France, and as far as tested, also on the Pacific Coast. When once established the vine will last many years. If killed down by frosts, it again readily springs up from the roots with a vigorous new growth. It has a long blooming season, and by occasional irrigations can be made to bloom almost any time except in winter. Seedling plants vary greatly in size and amount of bloom and time of blooming, but by proper selection and care a very early and long continued type of blooming plants can be obtained.

Physianthus albens is really a mid season bloomer, but in using this vine to exterminate moths to the best advantage we should have plants which would commence to bloom the latter part of April or the first of May, and to hasten the early blooming we should select types which bloom the earliest, then make cuttings in the fall from these, pot them, and towards spring, hasten their growth, either by keeping in a warm room or greenhouse, and when danger of killing frosts are over, transplant to the open ground.

It is advisable to get these plants in bloom as early as possible if we wish to use them to the greatest advantage in trapping codlin moths; also to keep them blooming as late as possible to destroy all late moths.

Physianthus albens and its near relatives, are not very

destructive to honey bees, perhaps a vine would entrap fifteen or twenty bees during a season.

This vine is worthy the attention of all of our experiment stations to test, especially for the destruction of the codlin moth. It is a sure thing that this vine attracts the codlin moths in large numbers during its blooming season, and that these are entrapped and killed by thousands.

In the Andes Mountains we are assured that there are many types of early and late blooming physianthus, as well as almost perpetual blooming species. We are working with the end in view of obtaining and testing all the various types as rapidly as we can. Also we hope to further improve the present physianthus which we have, in the way of producing a better type for the destruction of the codlin moth.

Physianthus albens from an ornamental standpoint is one of great beauty, and if it will succeed in all localities in exterminating moths its culture should be widely advised, but if it will only succeed in a few places the sooner we know this the better. About the best way to test this is to have all the experiment stations throughout the United States test this plant in all the various localities, and if successful to try and grow and propagate better sorts. That this plant is susceptible to great improvement in a short time is attested by its wide variation when grown from seeds.

I do not advertise this as a vine universal in its effects to exterminate the codlin moths but rather as an untried experiment, and something well worth looking into. However it does the work here, will it do it in other locations is the question.

Why it does not injure honey bees to any great extent I believe is that this gummy substance exudes freshly each night, or as soon as the sun goes down. The morning sun dries this up, so that bees can work on this plant with no apparent loss all day long. The moths do all their flying at night or towards evening, so they get thoroughly entangled. I have a bee ranch here so I can observe pretty closely the traits of this plant towards injuring bees. I would not recommend any plant that would be of injury to the bee business.

An event of considerable importance was the British Government order prohibiting importation of trees, plants and bulbs from foreign countries. The bulb merchants unquestionably suffered some inconvenience and loss of turn over, but the restrictions did us a good service in that both the trade and the public have been aroused to the fact that Bulb-farming in the British Isles is a branch of commercial horticulture, with possibilities for extensive development. So far as Fruit and Ornamental Trees, Roses, Perennials and other plants are concerned, nurserymen have cause to be grateful that the dumping of these into our auction rooms and market places has been checked, and if the Trade is alive to its own interests no effort will be spared to ensure that its advantages shall not be too lightly thrown aside as soon as war is over.—*Horticultural Trade Journal*.

PEACH SCAB CONTROL

Peach scab, which ranks next to the destructive brown rot in economic importance among peach diseases in the United States, and which at one time seriously menaced the success of commercial peach culture east of the Rocky Mountains, can be successfully controlled at small cost by spraying, according to a professional paper, Bulletin 395, recently published by the U. S. Department of Agriculture. Self-boiled lime-sulphur and a solution of finely divided wettable sulphur, which is a mixture of superfine sulphur, glue, and water, have been proved by experiments to be the best of the known sprays in controlling the scab. The applications can be made in commercial orchards at an average cost not exceeding five cents a tree. In certain experiments carried on by plant specialists of the Department of Agriculture such sprayings resulted in an increase in profits of about \$1.50 per tree.

The spraying for scab may be combined advantageously with treatment for other diseases, such as brown-rot, and insect pests, such as the plum curculio. If this plan is adopted, the following spraying schedule is suggested:

EARLY VARIETIES.—The early varieties, such as the Greensboro, Carman, Hiley, and those with similar ripening periods should be sprayed as follows:

(1) With arsenate of lead and lime about ten days after the petals fall. This application may be omitted in sections where the curculio is not a serious factor.

(2) With arsenate of lead and self-boiled lime-sulphur or finely divided wettable sulphur about a month after the petals fall. If the latter type of fungicide is used, the addition of lime, as in the first treatment, may be a desirable precaution against arsenical injury.

(3) With finely divided wettable sulphur or self-boiled lime-sulphur three to four weeks before the fruit ripens, but not less than four weeks before harvest if self-boiled lime-sulphur is used. This application may be omitted in sections where brown-rot is not seriously injurious.

MIDSEASON VARIETIES.—The treatment recommended for early peaches is applicable likewise, to midseason varieties, such as the Reeves, Belle, Early Crawford, Elberta, Late Crawford, and Fox. For such varieties, however, the third application is very essential and should not be omitted where brown-rot or scab injury is serious.

LATE VARIETIES.—The Salway, Heath, Bilyeu, and varieties with similar ripening periods should be treated as midseason varieties, with the addition of an application of the fungicide alone about a month after the second treatment.

The following concentrations of spray preparations are recommended: Arsenate of lead paste, 1½ pounds (powder, three-fourths pound) in 50 gallons; stone lime, 2 to 3 pounds in 50 gallons; self-boiled lime-sulphur, 8 pounds of lime and 8 pounds of flour of sulphur in 50 gallons; and finely divided wettable sulphur, 5 pounds in 50 gallons in the case of the paste (approximately 50 per cent sulphur) used in the foregoing experiments.

PROGRAM ELEVENTH ANNUAL MEETING OF
GEORGIA—FLORIDA PECAN GROWERS
ASSOCIATION

THOMASVILLE, GEORGIA, MAY 30 and 31st, 1917

WEDNESDAY, MAY 30th, 10 A. M.

Call to Order.

Invocation.

Address of Welcome - Mayor of Thomasville.

Response to Address of Welcome, W. C. Jones, Cairo, Ga.

President's Address, - C. A. Simpson, Monticello, Fla.

The Nut Case-bearer and Its Control,

J. B. Gill, Monticello, Fla.

Experience in Handling Pecan Rosette,

S. M. McMurran, Washington, D. C.

The New Pecan Project, C. A. Reed, Washington, D. C.

Question Box

WEDNESDAY, 2.00 P. M.

How to Develop an Orchard to the Bearing Age,

H. C. White, Putney, Ga.

Charlie Puckett, Putney, Ga.

How to Cultivate the Bearing Orchard,

Col. C. A. VanDuzee, Cairo, Ga.

B. W. Stone, Thomasville, Ga.

A Talk, - - E. Lee Worsham, Atlanta, Ga.

How to Avoid Winter-Killing,

W. W. Bassett, Monticello, Fla.

Question Box

WEDNESDAY, 8.30 P. M.

Banquet at Tosca Hotel, followed by round table discussion.

Report on the Behavior of the Leading Varieties.

Question Box

THURSDAY, 9.00 A. M.

The True Merits of a Paper Shell Pecan,

L. A. Nevin, Atlanta, Ga.

Some Pecan Statistics, - J. M. Patterson, Putney, Ga.

Will the Pecan Business be Overdone,

J. B. Wight, Cairo, Ga.

Report from the National Pecan Exchange,

W. P. Bullard, Albany, Ga.

Miscellaneous Business.

Report of Standing Committees.

Selection of Place of Next Meeting.

Election of Officers.

OFFICERS OF ASSOCIATION:

President, C. A. Simpson, Monticello, Fla.

Vice-President, W. P. Bullard, Albany, Ga.

Secretary-Treasurer, W. W. Bassett, Monticello, Fla.

QUARANTINES ON FIVE-LEAVED PINES, AND
CURRANT AND GOOSEBERRY PLANTS, ON
ACCOUNT OF WHITE PINE BLISTER RUST

Two orders have just been issued by the Secretary of Agriculture, effective June 1, 1917, on account of the White pine blister rust. One of these orders prohibits the further importation of currant and gooseberry plants from Europe and Asia. The other order quarantines all the States east of and including the States of Minnesota, Iowa, Missouri, Arkansas, and Louisiana, and

prohibits the movement from these States to points outside the quarantined area of all five-leaved pines and currant and gooseberry plants. There is a further prohibition of the movement of five-leaved pines and black currant plants to any point outside the heavily infected region comprising the New England States and the State of New York. This additional quarantine is made for the purpose of protecting other quarantined States, as well as the remainder of the country, from possible infection by white pine blister rust by means of the plants mentioned.

While this domestic quarantine, as noted, does not become effective until June 1, the attention of all nurserymen is called to the fact that in the meantime their voluntary agreement of a year or more ago not to ship any white pines or currant or gooseberry plants into the Rocky Mountain and the Pacific Slope States is expected to remain in full force and effect, and the inspectors of these Western States have been notified of this understanding.

UNITED STATES DEPARTMENT OF AGRICULTURE,
FEDERAL HORTICULTURAL BOARD.

Washington, D. C., April 25, 1917.

Dear Sirs:—

Referring to the quarantine orders sent you yesterday, you are advised that a press notice will go out very shortly in relation to these quarantines giving a statement of their scope. The fixing of the effective date of these quarantines at June 1st was done solely in the interest of the nurserymen in recognition of their needs and of their spring contracts for delivery. It is hardly necessary perhaps to say that the Board will expect nurserymen, in return, to scrupulously respect State quarantines in relation to the pines, currants and gooseberries covered in these orders, and it is understood that in the meantime the voluntary agreement of a year or more ago not to ship any white pines or currants or gooseberry plants into the Rocky Mountain and Pacific Slope States is to remain in full force and effect. The inspectors of these western states have been notified of this understanding.

Yours very truly,

C. L. MARLATT, *Chairman of Board.*

National Nurseryman Pub. Co., Inc.

Hatboro, Pa.

Berlin, Md., April 24, 1917.

Editor of National Nurseryman,

Flourtown, Pa.

Dear Sir:—

I hope every member of the American Association of Nurserymen will stop and consider for a moment the cost of growing fruit trees and for another season make their prices to cover at least the actual cost of growing. It is a matter of vital importance and should receive serious consideration at the coming convention.

Very truly yours,

J. G. HARRISON & SONS,

ORLANDO HARRISON.

NOTICE OF PROPOSED QUARANTINE ON ACCOUNT OF THE CITRUS CANCKER

A public meeting will be held at the Department of Agriculture, Washington, D. C., Room 410, Bieber Building, at 10 o'clock A. M. on May 8th, 1917, in order that any person interested in the subject of the proposed quarantine may be heard.

It is proposed to prohibit the importation of Citrus fruits from the following countries: India, Siam, Indo-China, China, the Malayan Archipelago, the Philippine Islands, Oceania, except Australia, Tasmania and New Zealand, Japan, including Formosa and other islands adjacent to Japan, and the Union of South Africa, in all of which countries the Citrus canker is known to be widely prevalent.

HERE ARE GARDENS

As the spring comes up the land and the time of planting is upon us, we would say a word for the wild flowers and the native shrubs, not as blossoms of the woods, but as integral parts of our gardens. To some of us it is a little depressing to see so much of Italy and England, of Holland and France, in the American domestic scene, and so little of America. We all have irises about our garden pools, (German, Japanese, Spanish, English, even Siberian), but how many of us have planted that aristocrat of American brook banks, the cardinal flower, which responds superbly to cultivation? We make a great show of tulips (which are often gaudy splotches on the lawn, as nearly ugly as a flower ever can be), and forget the lovely dog-tooth violet, that sunlit lily which follows the melting snow up the slopes of the Rocky Mountains, making the high meadows a cloth of gold, and nods equally at home where the salt Atlantic fogs enwrap it. How many Americans have backed a border with goldenrod and New England asters, shooting up prodigiously in enriched soil, or brightened a shady spot with crimson bunch berries? The list is endless of our native plants, the flora of any particular region, New England, say, or the prairie States, or the southern highlands, or the Rocky Mountains furnishing without alien additions a plenitude of bloom and color with which to develop a native garden. A true garden style, we affirm, must be based on the native flora and the native landscape. To copy Italy, England, Japan, is to have no style of our own. We know a man in Iowa who, on his eleven acres, has neither tree nor shrub nor flower not indigenous to his State, yet his garden is a lovesome spot just the same. We do not ask for this exclusiveness—who would banish the pansies, for example, or the Canterbury bells?—but we do urge all our readers who plant a garden to save some corner, or some section of the borders, for the native blooms, to weave them into the garden scheme, to study the native landscape and try to base a garden style on that. You will perhaps be surprised to learn how much nature knows about the creation of beauty!—*Colliers*.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC.

Required by the ACT OF CONGRESS OF AUGUST 24th, 1912

Of the NATIONAL NURSERYMAN, published monthly at Hatboro, Pa., for May 1, 1917.
State of Pennsylvania,
County of Philadelphia.

Before me, a Notary Public, in and for the State and county aforesaid, personally appeared Thomas B. Meehan, who, having been duly sworn according to law, deposes and says that he is the Business Manager of the NATIONAL NURSERYMAN, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation) etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24th, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse side of this form: to wit:

1. That the names and addresses of the publisher, editor, managing editor and business managers are:

Publisher—THE NATIONAL NURSERYMAN PUBLISHING CO., INC., Hatboro, Pa.

Editor,—ERNEST HEMMING, Flourtown, Pa.

Managing Editor,—None.

Business Manager,—THOMAS B. MEEHAN, Dresher, Pa.

2. That the owners are:

Mrs. Ellen B. Yates, Rochester, N. Y.

James McHutchison, Jersey City, N. J.

Thomas B. Meehan, Dresher, Penna.

Albert F. Meehan, Dresher, Penna.

Penrose Robinson, Hatboro, Penna.

3. That the known bondholders, mortgagees and other security holders owning or holding 1 per cent. or more of total amount of bonds, mortgages, or other securities are: NONE.

THOMAS B. MEEHAN, Business Manager.

Sworn to and subscribed before me this 7th day of April, 1917.

Elmer Miller, Notary Public.

(My commission expires March 11, 1921.)

IF I WERE A NURSERYMAN

I would prepare a series of letters on trees, shrubs, and plants and the reasons for beautifying property;—the making of homes from mere houses.

I would call attention to the small outlay necessary to proper planting;—to the great advantage of planting to increase the value of property and to make it more saleable.

I would subscribe to Luce's Daily Landscape Architects Report and follow up each prospect. I also would get lists of owners of houses in the suburbs of large cities and send each one of my letters.

The first letter might show how the intrinsic value of property would be increased by proper planting. The second might deal with the making of homes from mere houses. The next might give the expense of planting different size lots and also suggest that the prospect send you the size, contour and shape of his lot for suggestions and prices of proper planting.

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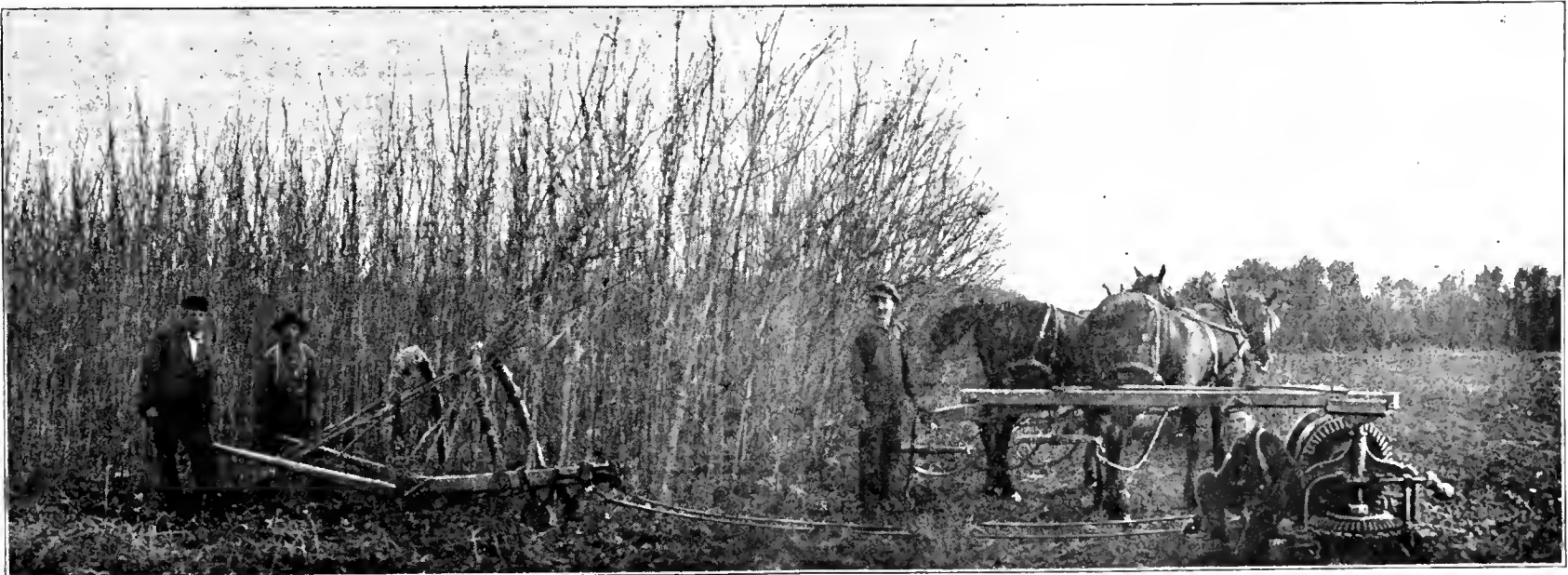
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When writing to Advertisers please mention the National Nurseryman.

Bobbink & Atkins

Nurserymen and Florists

RUTHERFORD, NEW JERSEY

Palms and General Decorative Plants, **INSPECT**
Conifers, Shade and Ornamental Trees **INVITED**

ASK FOR WHOLESALE CATALOGUE

AUGUST ROLKER & SONS

NEW YORK

Import to order for the trade only.

From Europe or Japan

ORNAMENTAL SHRUBS, TREES, ROSES, BULBS

Write for estimates or trade lists

Send your orders for fall 1917 delivery timely please.

Address

P. O. Box 752 or 51 Barclay Street

A Large Stock of
Apple, Pear, Cherry and Peach
Grape Vines, Blackberry and
Raspberry Plants

And a general line of ORNAMENTAL TREES
and SHRUBS. All stock clean and thrifty, the
best that can be grown.

T. B. WEST, Perry, Ohio.

Fruit Trees, Roses, Manetti Stocks

in heavy quantities

JOHN WATSON, Nurseryman,

NEWARK, NEW YORK,

Is our sole agent for the United States and Canada

S. SPOONER & SONS,

The Nurseries

Hounslow,

Est. 1820

England

W. T. HOOD & CO.

OLD DOMINION NURSERIES

RICHMOND

VIRGINIA

We offer for Spring 1917

A complete line of Nursery Stock. We can make Special
prices on Peach trees, Apple trees, &c. We also have to
offer a nice line of Norway Maples, Pin Oaks, Oriental
Planes, &c. California Privet, Amoor River Privet, Nor-
way Spruce, Peach Seed, Tenn. and N. C. Naturals.

Send us your want list for quotations.

SCARFF'S NURSERY

Headquarters for

Small Fruit Plants

1200 Acres "At it 25 Years"

Strawberries

Currants

Rhubarb

Raspberries

Gooseberries

Asparagus

Blackberries

Grape Vines

Horseradish

Dewberries

Privet

Hardwood Cuttings

Berberry

Spirea

Butterfly Bush

100,000 transplanted Raspberry, Blackberry and Dewberry plants
for retail trade. See wholesale list before placing your order.

W. N. SCARFF & SONS

NEW CARLISLE,

OHIO

W. FROMOW & SONS

Azalea mollis, Rustica & Ghent in all the leading varieties,
grown from layers not grafted.

Manetti Stocks clean and well rooted for grafting or open
ground.

Standard, Climbing, Weeping and Dwarf Roses in great variety
Rhododendrons, the cream of the Hardy American varieties.

Andromeda floribunda, japonica, and speciosa, bushy budded
plants.

Kalmia latifolia.

Green and River's Purple Beech in all sizes up to 12 feet.

Prices and full particulars on application.

WINDLESHAM NURSERIES

Surrey,

England.

Portland Wholesale Nursery Co.

Rooms 6 & 7 122½ Grand Ave. Portland, Oregon

WHOLESALE OF NURSERY STOCK AND
NURSERY SUPPLIES

A very complete Line of Fruit and Ornamental Trees,
Shrubs, Vines, &c.

Specialties

CLEAN COAST GROWN SEEDLINGS
OREGON CHAMPION GOOSEBERRIES
and PERFECTION CURRANTS

Write now.

ALL "AMERICAN NURSEYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by
all Horticultural traders. It is also taken by over 1000 of
the best Continental houses. Annual subscriptions to cover
cost of postage, \$1.00. Money orders payable at Lowd-
ham, Notts. As the H. A. is a purely trade medium appli-
cants should, with the subscription, send a copy of their
catalogue or other evidence that they belong to the nursery
or seed trades. Address

Editors of the "H. A." LOWDHAM, NOTTS,
ENGLAND

TREES

Largest assortment in New Eng-
land. Evergreens, deciduous trees,
both common and rarer varieties.

Sturdy, choice stock that can be
depended upon. Send for catalog
and special trade prices.

The Bay State Nurseries

North Abington
Mass.

SHRUBS

This New England soil and cli-
mate produce fine sturdy shrubs.
Special trade prices. By the thous-
ands, hardy Native and Hybrid Rho-
dodendrons—transplanted and accli-
mated. Send your lists let us est.

When writing to Advertisers please mention the National Nurseryman.

ORNAMENTAL STOCKS

NURSERIES

420 ACRES

WE GROW

FRUIT TREE STOCKS—All Sizes.

300 varieties of Conifers, 1 to 4 years old.

1200 varieties of Ornamental Trees and Shrubs, 1 to 3 years old.

1600 varieties of New and Old Ornamental Trees & Shrubs in all Sizes

250 varieties of Climbing Plants.

400 varieties of Conifers, 1 to 4 feet high.

400 varieties of Perennials.

800 varieties of New and Old Roses.

We Have No Agents.

Write direct to us and

ask for **WHOLESALE**

CATALOGUES

TRANSON BROS. & D. DAUVESSE'S NURSERIES,

16 Route d'Olivet

BARBIER & CO., Successors

Orleans, France

THE CHASE LABELS

For Nurserymen and Florists are Excelled by None

Plain, Painted, Wired with Tinned or Copper Wire and

PRINTED IN ANY MANNER that may be called for

Prices as low as First-Class Work and Unequalled Promptness in

Delivery will justify.

THE BENJAMIN CHASE CO.

P. O. Address, DERRY VILLAGE, N. H.

Western Union Telegraph, DERRY, N. H.

Forest Tree Seedlings

AND

ORNAMENTAL SHRUBS

We offer for spring 1917 our usual line of Forest tree seedlings and Ornamental Shrubs, Cuttings, etc. Write for spring trade list.

FOREST NURSERY COMPANY

McMinnville,

Tennessee

BAILEY'S BRAND NEW STANDARD Cyclopedia of Horticulture

The National Nurseryman, by special arrangement with the publishers, offers this work on easy terms. Six large quarto volumes. More than 3,600 pages. 24 full page exquisite color plates. 96 beautiful full page sepia halftones. More than 4,000 text engravings. 500 Collaborators. Approximately 4,000 genera, 15,000 species and 40,000 plant names.

The new Standard Cyclopedia of Horticulture has been freshly written in the light of the most recent research and experience. It is not merely an ordinary revision or corrected edition of the old Cyclopedia, but it is a new work from start to finish with enlarged boundaries geographically and practically; it supercedes and displaces all previous editions or reprints of every kind whatsoever. It is both an Encyclopedia and a Manual, for with the aid of its Synopsis and Key, amateur and professional alike may quickly identify any plant, shrub or fruit contained within the set, and then receive expert instructions for its cultivation.

Sixth and Final Volume Now Completed

Price for this Valuable Work \$36.00

The National Nurseryman
Hatboro, - Penna.

NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER.—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.

When writing to Advertisers please mention the National Nurseryman.

HARRISON EVERGREENS

Symmetrical, well-grown, transplanted specimens with an abundance of fibrous roots and good ball

EVERGREENS

Arborvitae, American

1,000 1 to 1½ ft.
1,000 1½ to 2 ft.
1,000 2 to 2½ ft.
1,000 2½ to 3 ft.
1,000 3 to 3½ ft.
1,000 3½ to 4 ft.
500 4 to 4½ ft.

(Arborvitae Biota Orientalis)

25, 4 to 5 ft.

Arborvitae, Hovey's (Globular)

5 3 to 3½ ft.
5 3½ to 4 ft.

Cedar, Indian (Cedrus Deodora)

5 9 to 10 ft.
5 10 to 12 ft.
5 12 to 14 ft.

Cedar, Red (Transplanted)

300 12 to 18 in.

Cedar, Blue Virginia

250 18 to 21 in.
250 2 to 2½ ft.

Fir, Cephalonian

25 2 to 2½ ft.
25 2½ to 3 ft.
25 3 to 3½ ft.
25 3½ to 4 ft.
30 4 to 4½ ft.
30 4½ to 5 ft.
30 5 to 5½ ft.
20 5½ to 6 ft.
10 6 to 7 ft.

Fir, Nordmans

50 1 to 1½ ft.
50 1½ to 2 ft.

Hemlock, Canadian

Well-formed Specimens.

1,000 1½ to 2 ft.
1,000 2 to 2½ ft.
300 2½ to 3 ft.
200 3 to 3½ ft.
200 3½ to 4 ft.

Juniper, Irish

500 18 to 24 in.

Spruce, Colorado Blue

Selected Blues—good shape; compact

50 1½ to 2 ft.
50 2 to 2½ ft.
75 2½ to 3 ft.
100 3 to 3½ ft.
100 3½ to 4 ft.
100 4 to 4½ ft.
100 4½ to 5 ft.
75 5 to 5½ ft.
50 5½ to 6 ft.

Spruce, Colorado Green

Good specimens; compact

25 1½ to 2 ft.
50 2 to 2½ ft.
100 2½ to 3 ft.
100 3 to 3½ ft.
100 3½ to 4 ft.
190 4 to 4½ ft.
180 4½ to 5 ft.
60 5 to 5½ ft.
30 5½ to 6 ft.

Spruce, Douglas

10 6 to 6½ ft.
10 6½ to 7 ft.
10 7 to 7½ ft.

Spruce, Koster's Blue

Specimen Plants

20 1 to 1½ ft.
30 1½ to 2 ft.
40 2 to 2½ ft.
50 2½ to 3 ft.
60 3 to 3½ ft.
70 3½ to 4 ft.
80 4 to 4½ ft.
50 4½ to 5 ft.

Spruce, Norway

2,000 3 to 3½ ft.
2,000 3½ to 4 ft.
1,500 4 to 4½ ft.
1,500 4½ to 5 ft.
1,000 5 to 6 ft.
500 6 ft.
300 7 ft.
100 8 ft.

Spruce, White

Fine Specimens

30 3½ to 4 ft.
40 4 to 4½ ft.
40 4½ to 5 ft.
30 5 to 5½ ft.
30 5½ to 6 ft.
20 6 to 6½ ft.
10 6½ to 7 ft.

Pines, Austrian

50 3 to 3½ ft.
50 3½ to 4 ft.
50 4 to 4½ ft.
10 4½ to 5 ft.
10 5 to 5½ ft.

BOXWOOD (Pyramidal)

500 24 in.

BOXWOOD (Bush)

500 24 in.

Strawberry Plants

25,000 Climax
15,000 Excelsior
175,000 Gandy
225,000 Klondike
100,000 Lady Thompson
30,000 Mitchell's
15,000 New York
25,000 Parson's Beauty
25,000 Tennessee Prolific
25,000 Warfield
10,000 Wolverton

50,000 Asparagus roots 2 yr.

50,000 peach trees ¾ to 1½ inch grade of Belle of Georgia, Beer Smock, Elberta, Champion, Fox, Ford's Late, Iron Mountain, Krummell's Old Mixon, Salway, Stump, Wonderful.

50,000 apple 1 yr. 5/8 to half inch Delicious, Grimes', McIntosh, Northern Spy, Paragon, R. I. Greening, Smokehouse, Stayman's, Stark, William's, Yellow Transparent.

10,000 apple 2 yr. ¾ inch and 5/8 in. of Baldwin, Graven-

stein, McIntosh, Paragon, No. Spy, R. I. Greening, Staymans, Stark and Wolf River.

1,000 cherry, Bing, Governor Wood, Schmidt, and Tartarian.

2,000 Bartlett ¾ and 5/8.

2,000 Keiffer ¾ and 5/8.

100,000 Privet from 6 inches to 3 feet.

100,000 Barberry from 6 inches to 2 feet.

Evergreens and shade trees.

HARRISONS' NURSERIES,

Berlin,

J. G. Harrison & Sons,

Maryland



THE NATIONAL NURSERYMAN



JUNE 1917

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

*Peach, Gooseberries,
Currants, Berberis,
Spirea Van Houtte,
Other Ornamental Shrubs,
H. P. Roses, Etc.*

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.
MONROE, MICH.

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa



Our Specialty

A large and complete line of high quality Nursery Stock
for the wholesale trade.

CARLOTS OF

Apple, Cherry, Peach, Green
Ash (*Fraxinus*
Lanceolata), Elm American
White, Maple Silver, Sycamore
American, Shrubs in Assortment

Send for trade list and bulletins. Let us quote your wants.

Nursery Trade

depends largely
on Confidence.

BUSINESS SECRETS RESERVED



FELIX & DYKHUIS

WHOLESALE NURSERIES

Boskoop, - - Holland

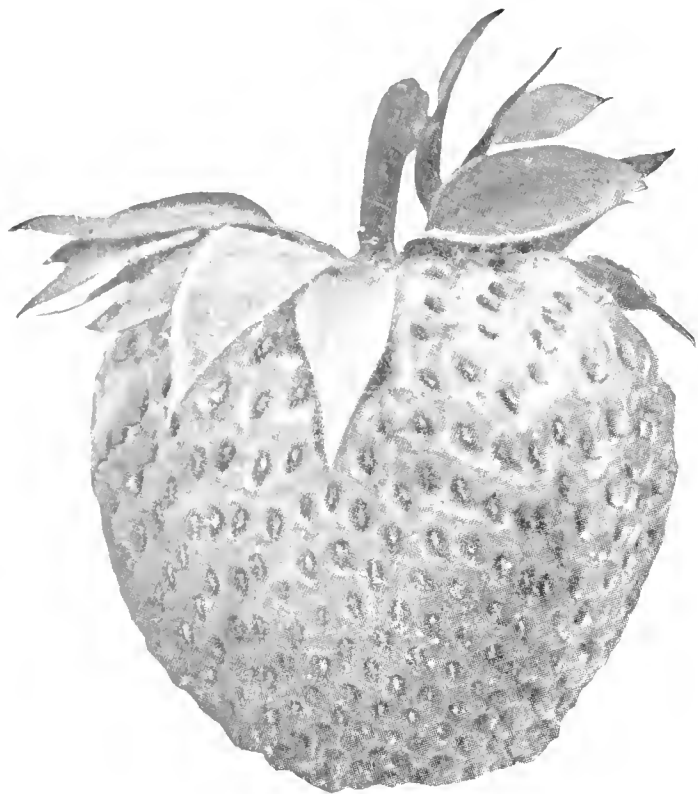
Ask for Our Beautifully Illustrated Catalogue

Watch Our Bulletins

They mean Quality
Stock, Right Prices,
and Prompt Shipments.

C. R. BURR & CO.

Manchester, : Conn.



Strawberry Plants

We are making a specialty of supplying nurserymen and dealers with TRUE-TO-NAME Strawberry Plants. The kind that give satisfaction in every respect.

We supplied several millions this year to nurserymen for reshipping, our superior packing methods make this very successful.

If you do not already do so, catalog them this year and we will take care of your orders.

See us at Philadelphia. **BADGE No. 24**

The W. F. ALLEN CO., 100 Market Street, Salisbury, Maryland

For Fall of 1917

*WE will have our usual line
of Ornamentals, Shade
Trees, Perennials, Apple,
Plum, Cherry, Peach, etc.*

C. M. Hobbs & Sons

Marion County

Bridgeport, - - Indiana

FRENCH FRUIT STOCKS

Offered for Account of

VINCENT LEBRETONS NURSERIES

Angers, France

December or February shipment from France

Mahalebs, Myrobolans, Mazzards, Apple, Pear, Quince, Manetti and Multiflora Stocks, etc. Also a full line of Ornamentals in lining-out sizes.

Advance prices now ready for Nurserymen.

RAFFIA

RED STAR BRAND, XX Superior, A. A. West Coast, also dyed in various colors. Stock always on hand.

RAFFIA MATS

better than burlap.

HARDY JAP. LILY BULBS

Such as Liliun AURATUM, RUBRUM, ALBUM, MAGNIFICUM, Melpomene, Roseum. Import prices. Case lots.

Fall or Spring Shipment

Write for prices

McHUTCHISON & CO. THE IMPORT HOUSE

95 CHAMBERS ST.,

NEW YORK

All Roads Lead through HARRISBURG

Rochester



Pittsburgh

HARRISBURG



PHILADELPHIA
CONVENTION CITY
JUNE 26-29

Baltimore

Washington

STOP AND SEE VS

PLAN TO VISIT HARRISBURG

On your way to the Philadelphia Convention

JUNE 27 to 29

YOU and your friends are invited to stop in Harrisburg and visit our institution. You will get an idea of the methods we employ in producing advertising and printing for nurserymen, seedsmen, and other lines of business. You will then realize why *McFarland Methods are more profitable*—and therefore less expensive—than the common “garden variety” of haphazard methods.

Probably you can find time to see the State Capitol, the most magnificent building of its character in the country; the picturesque river front, the city’s formal entrance, and Riverside Park.

Our building is about five minutes’ walk from the Pennsylvania Railroad Union Station. All trains stop in Harrisburg—and there are nearly 200 a day. Let us know when you will arrive, and our representative will meet you at the station.

J. HORACE McFARLAND COMPANY

Makers of Catalogues

THE McFARLAND PUBLICITY SERVICE

Producers of Advertising

HARRISBURG, PENNA.—THE CAPITAL CITY

PHILADELPHIA IN 1917

Philadelphia—the city in which the infant nation was raised to a sturdy youngster;

Philadelphia—the first capital of the greatest democracy the world has ever known;

Philadelphia—with the historic Independence Hall; the sacred Liberty Bell; the birthplace of the American flag;

Philadelphia—the home of Benjamin Franklin, printer, patriot, philosopher, statesman;

Philadelphia—with its institutions of learning, of art, of merchandising, of publishing;

Philadelphia—the third city of the United States; and increasing at the rate of 80 persons every day.

SEE PHILADELPHIA THIS YEAR

PAINESVILLE NURSERIES



THE BEAUTIFUL FLOWERING ALMOND

Our representatives at the convention will appreciate the opportunity for meeting friends and patrons; and will take much pleasure in going over the matter of future sales.

Growing blocks in all departments came thru the winter in good shape and are looking fine.

We expect to be in position to supply our wholesale trade from A to Z in first quality stock; and bespeak consideration before your fall orders are definitely placed.

THE STORRS & HARRISON CO.

NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

When writing to Advertisers please mention the National Nurseryman.

J. & P. Preferred Stock.

J. & P. Preferred Stock.

Not How Cheap, But How Good

is our slogan. It is our ambition to grow and sell the best there is in our lines,—because **quality goods sell themselves**, and at living prices. It isn't necessary to be always cutting under the other fellow.

We grow a pretty complete assortment but our specialties are—

Field-grown Roses

Clematis, Large-flowering

Tree-form Hydrangeas

Shrubs

Paeonias


Ampelopsis Veitchii

Clematis Paniculata

Tree-form Lilacs

Perennial Plants

Shade Trees

 Note: We sell to the trade only. Have no retail business of our own. Our trade customers get and are entitled to our very best stock and very best attention.

Jackson & Perkins Company

NEWARK

NEW YORK

J. & P. Preferred Stock.

J. & P. Preferred Stock.

Heikes—Huntsville—Trees



To Meet Your Needs in
Peach, Apple, Cherry, Pear, Plum, Compass-Cherry-Plum, Apricot, Pecan Seedlings, Privets, Roses (budded and own-root), Abelia Grandiflora, Berberis Thun., Spirea V. H. and Reevesiana, Lonicera Fragrantissima and Halleana, Kudzu Vines, and Sundry Ornamentals.

In good assortment of standard varieties. All our own growing.

Send us your orders and inquiries.

ROSES, Budded H. P's. One of our Specialties.

We grow them by the hundred thousands.

HUNTSVILLE WHOLESALE NURSERIES

HUNTSVILLE, ALA.

FIFTIETH YEAR

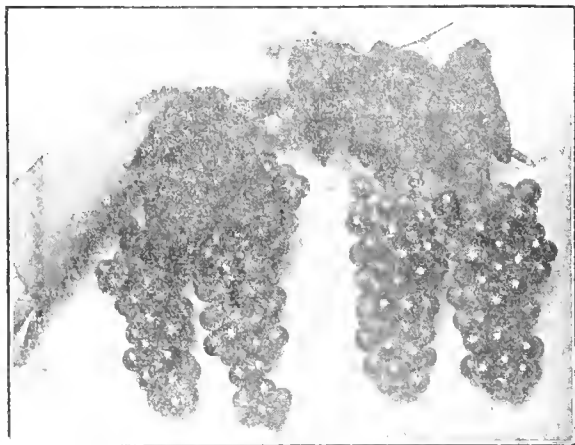
T. S. HUBBARD GO.

FREDONIA, N. Y.

The longest established and best known growers of

Grape Vines

And the largest stock in the United States



CURRENTS and GOOSEBERRIES

A fine stock of leading varieties. One and two years.

BLACKBERRIES

The largest and best stock of root-cutting plants in this country. All the best varieties. Snyder in great quantity. Our blackberry plants are as well furnished with fibrous roots as our well-known grape vines.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of
Own Root Roses

ORNAMENTAL TREES SHRUBS

BERRIES CLEMATIS

EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

70 Years

1000 Acres

When writing to Advertisers please mention the National Nurseryman.



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE



THE

North-Eastern Forestry Co.

CESHIRE

...Connecticut...

An Invitation



Is extended every Nurseryman attending the Annual Convention of the American Association of Nurserymen, to be held in Philadelphia, June 27, 28, and 29, to visit our place either before or after the meeting. We are located on the main-line of the Pennsylvania Railroad, an hour and a quarter from the convention city.

Our blocks, comprising 150 acres of stock, are grown exclusively for Nurserymen—not for the Auctions nor Department Stores nor private planters; we sell to the Trade only.

Come and see us; the latch-string is on the outside.



Princeton Nurseries

June first. At PRINCETON, in New Jersey

J. H. Skinner & Co.

Topeka, - Kansas



Apple Seedlings

Japan and French

Pear Seedlings

Forest Tree Seedlings

FRUITS TREES

SMALL FRUITS

Rhubarb, Myatt's Linnaeus, divided roots, pure stock; Shade Trees, including a fine lot of Soft Maple and White Elm.

CATALPA BUNGEI

6½ foot stems, straight and smooth

Bechtel's Double Flowering Crab

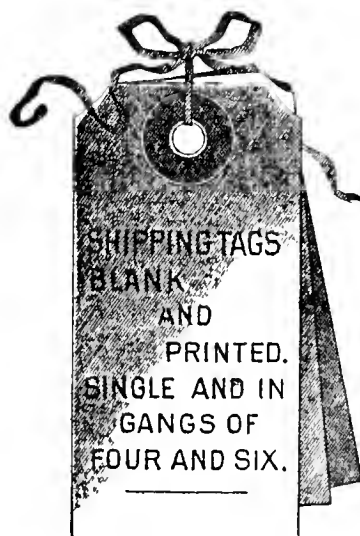
Ornamental Shrubs

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

Rawhide Brand of Shipping Tags and Tree Labels

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

C. Van Kleef & Company Nurserymen

BOSKOOP, - HOLLAND

Specialties: Kalmias, Andromedas, Ilex opaca, erenata, glabra, Azalea viscosa, multiflora, calendulacea and arborescens, Cornus florida rubra, Vaccinium corymbosum and macrocarpa, etc., etc.

Representatives:—

John Van Kleef and John A. Driesprong

From 1 February until 1 June

Care Maltus & Ware,

14 STONE STREET - NEW YORK

“Your Country Needs You”.

—Needs you and me. Maybe age or health or responsibilities prevent our going to the front; but our sons or our neighbors' sons are going; and Uncle Sam has called on us to lend the money; his bonds are offered at 3½% interest; the security is the best in the world; the interest, what your savings bank is paying. But not for the security, and not for the interest, but because it is our Country's war and therefore yours and mine, let us do our part. It takes both Men and money to wage a war and those who serve with funds or labor share alike with those who fill the trenches, the honor of upholding the Flag and what it means to us and to humanity:

“The one Flag: the great Flag:
The Flag for me and you,
Glorified all else beside,
The Red and White and Blue!”

Let us do our bit. As a trade we Nurserymen are poor: Fortune has been chary of her smiles; close to the soil, we love our Land, and when she calls, we must respond gallantly; for the measure of the service is all within the spirit prompting it. Buy a bond and help to place our Men beside the gallant sons of France who fight for all that makes life worth the while; to place our ships with those of Britain whose Navy stands between us now and our disaster; to place our Flag along that western line where Civilization hangs trembling in the balance.

Buy a bond—\$50, \$100, \$1000; your own bank, today, will handle your subscription.

JOHN WATSON

...Wanted Quick...

1,000,000	Assorted Blackberry root cuttings.
10,000	One year old Cuthbert Raspberry plants.
2,000	“ “ “ Golden Queen Raspberry plants.
50,000	“ “ “ Downing Gooseberry plants.
500,000	Senator Dunlap Strawberry plants.
1,000	One Year small Victoria Rhubarb.
25,000	“ “ Cherry Currant plants.
10,000	“ “ Black Naple Currant Plants.
5,000	“ “ White Currant plants.
100,000	Cherry Currant cuttings.
50,000	Black Naple Currant cuttings.
25,000	White Currant Cuttings.

We pay cash.

E. De Roo Mitting, General Manager

**H. J. & Alfred Mitting's
Nurseries**

MORRIS, ILL.

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa.

The Best Tree Digger on Earth



Used and Recommended by Leading
Nurserymen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

Stark Bros. Nursery & Orchards Co.
LOUISIANA, MO.

The Best In Nursery Products

We carry a full line of fruit and ornamental trees, evergreens, shrubs, etc. Send us a list of your wants.

A FEW SPECIALS

Oriental Planes from 1¼ to 3 inch caliper. A large stock of Sugar Maples, American Elms, Carolina Poplars, Lombardy Poplars, Beech grafted River's, and Fern-Leaved, Double Flowering Japan Cherries, Prunus Pissardi, Flowering Apples, Flowering Peaches, Magnolia Tripetela, Japan and American Judas, Japan Walnuts, American Arbor Vitae, Hemlock and Norway Spruce, Altheas, Forsythias, Philadelphus, Viburnum Plicatum, Weigela, Eva Rathke, etc.

10,000 Downing Gooseberries, 2 years No. 1.

HOOPES BRO. & THOMAS COMPANY

THE WEST CHESTER NURSERIES

Established 1853 West Chester, Pa. Incorporated 1907



BERRY'S Wholesale Nursery

Small fruit plants in variety; rhubarb; horseradish; California Privet; Barberry Thunbergii; Hydrangea P. G.; Spirea Van Houghti; Peonies—home grown and imported; Imported Boxwood, etc.

Stock in storage. Can ship any time.

See list before placing your order.

P. D. BERRY,

Dayton

Ohio

We Are Prepared To Supply The Trade

ROSES, Field-grown, own roots and budded.
ABELIA GRANDIFLORA. Transplanted, field-grown.
BERBERIS JAPONICA.

AZALEA INDICA (Home-grown)

GARDENIAS.

ENGLISH LAUREL.

MAGNOLIA GRANDIFLORA.

MAGNOLIA FUSCATA.

OLEA FRAGRANS.

CAMPHOR (pot-grown.)

LIGUSTRUM JAPONICUM, LUCIDUM, NEPALENSE,
and other good varieties. fine bushy plants.

SATSUMA ORANGE. Field-grown, budded on Citrus
Trifoliata.

BIOTA AUREA NANA (Berckmans' Golden Arbor-
vitae)

BIOTA AUREA CONSPICUA.

RETINISPORA. In variety.

JUNIPERUS. In variety.

WISTARIAS. Grafted, best sorts.

APPLES.

JAPANESE PERSIMMONS.

ENGLISH WALNUTS.

MULBERRIES.

SPIRAEA THUNBERGII. A beautiful lot of stocky
plants.

A fine stock of Hackberries, Koelreuteria, Tulip Pop-
lar, Magnolia Purpurea, Texas Umbrella, Sycamore and
Elms.

Send us a list of your wants and let us give you
quotations.

P. J. BERCKMANS CO., Incorporated
Fruitland Nurseries, Augusta, Georgia

When writing to Advertisers please mention the National Nurseryman.

Native Trees, Shrubs and Vines

At Special Prices
WHOLESALE ONLY

Sweet Hollow Nurseries

WEST HILLS, HUNTINGTON

Long Island, - New York

ORNAMENTAL

TREES, SHRUBS, VINES, EVERGREENS
HARDY HERBACEOUS PLANTS

225 Acres

Entirely devoted to the growing of the
best quality of ornamental nursery stock.

WHOLESALE ONLY

We also grow the "unusual" things, you
cannot find elsewhere.

Small Trees and Shrubs for
Planting in Nursery Rows.

We shall have our usual supply for Spring
delivery. Catalogue ready January first.

RAFFIA HEADQUARTERS

Supply of our usual brands on hand at
all times.

Thomas B. Meehan Co.,
WHOLESALE NURSEYMEN

Dresher, - Penna.

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Fall 1917

GRAPE VINES—One and two years old. Varieties
largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas.
Free from weed seeds, all cleaned and guaranteed
first class.

Correspondence solicited. Price list upon request.

CHAS. M. PETERS

P. O. Address, Salisbury, Wicomico County, Md., R. F. D. 3

Long Distance Phone and Telegraph, Salisbury, Md.

The Framingham Nurseries

200 Acres

High Grade
Trees, Shrubs,
Evergreens,
Vines, Roses,
Etc.



Fine Stock
of
Rhododendrons
Kalmias
and
Andromedas

Send for Price List

W. B. WHITTIER & CO.

FRAMINGHAM, MASS.

We have a splendid stock of

Grape Vines

and other small fruit plants for the Nursery trade, graded
up to the highest standard and sure to please you.

Give us a trial order, send in your list now for quotations

WHELOCK & CONGDON

SUCCESSORS TO
WILLETT & WHELOCK

North Collins, - N. Y.

Foster-Cooke Co.

Nurserymen

Fredonia, N. Y.

Growers of

Grape Vines, Gooseberries, Currants

One and two years old. Graded up to the highest standard.
Our stock never looked better. Write us for catalog. Send
us your list of wants. Our prices are right, our stock
A No. 1.

We grow our Stock up to QUALITY and GRADE, not
down to a price. Nevertheless, our prices are always in
line, you can't afford to pay less, and there's no sense in
paying more. If you are pleased with what you have been
getting, you will be better pleased with our stock.

REMEMBER!

If its a hardy perennial or so called old fashion flower worth growing, we have it in one shape and another the year round. We have the largest stock in this country, all Made in America, and our prices—

Why say more here. Send for our Wholesale price list of varieties and benefit from the opportunities this affords you.

Our motto: "Maximum Quality, Minimum Cost."

Address, R. W. Clucas, Mgr.
Palisades Nurseries, Inc. Sparkill, N. Y.

Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

Prepare for Fall by securing the best Cherry to be found. Our blocks of Cherry are the largest in the U. S. and quality the best. While the U Boats have been sending Mahalebs to the bottom the past two years, we have been fortunate in securing our usual supply and will have a splendid lot of trees to offer in the following:

CHERRY TWO YEAR general list of varieties
 CHERRY ONE YEAR 11-16 up Sweets and Sours
 PEACH ONE YEAR leading varieties
 PLUM Japans, European and Hansen Hybrids
 COMPASS Cherry and Apricots
 APPLE leading varieties in connection with other stock only
 Grafted English Walnuts and Northern Pecans

Special prices to car lot buyers on large orders

We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities. Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS
"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by
The Roessler & Hasslacher Chemical Co.
100 WILLIAM ST. - NEW YORK, N. Y.

You can save Time and Money

If you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

Sarachan & Rosenthal

64-66 Hanover Street

Rochester, - - New York

WE OFFER

Grape Vines, Currants and Gooseberries
 in all varieties and grades

—also—

Grape and Currant Cuttings and Light
Grade of Vines for Lining Out
 in Nursery Rows

WRITE FOR PRICES

F. E. SCHIFFERLI, Fredonia, N. Y.

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

We offer for Fall 1917

250,000 PEACH, 40 Varieties, 1 year buds
 CALIFORNIA PRIVET, 1 year and 2 year
 ASPARAGUS, 1 and 2 year
 DOWNING GOOSEBERRY PLANTS, 2 year
 BARBERRY THUNBERGI, 2 and 3 year transplanted

Can supply the above stock in car load lots or less, also, have a large stock of Rhubarb, Cumberland Raspberry Plants, Spireas, Deutzia Assorted, nice specimen plants. Evergreens, Horse Chestnut, N. Maple, Lombardy Poplar and Planes, etc.

If interested try and meet me at the Convention.

We will make attractive low prices for early orders
 Send List of Wants

WOOD LABELS

For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

Dayton Fruit Tree Label Co.

South Canal St., Dayton, Ohio

When writing to Advertisers please mention the National Nurseryman.

Hill's Evergreens

TO THE TRADE

We extend our sincere thanks for the patronage accorded us this season, and assure you we will try harder than ever to merit your continued confidence and good will.

THE CONVENTION

Our Company will be represented at the Convention by D. Hill, A. H. Hill and N. E. Averill, and hope to meet all new and old friends and renew old acquaintanceships, and do our bit to help make the 1917 Convention the most successful ever held.

The Officials of our Nurserymen's Association deserve the support and encouragement of every nurseryman in the country. They have labored faithfully throughout the year for the general good of all. Let every nurseryman join the Association and help. A good slogan: 1000 members for 1918.

BADGE No. 21

THE D. HILL NURSERY CO., INC.



EVERGREEN SPECIALISTS
LARGEST GROWERS IN AMERICA

Dundee, Illinois

BOX 402



The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXV.

HATBORO, PENNA., JUNE, 1917

No. 6

Entrance Planting

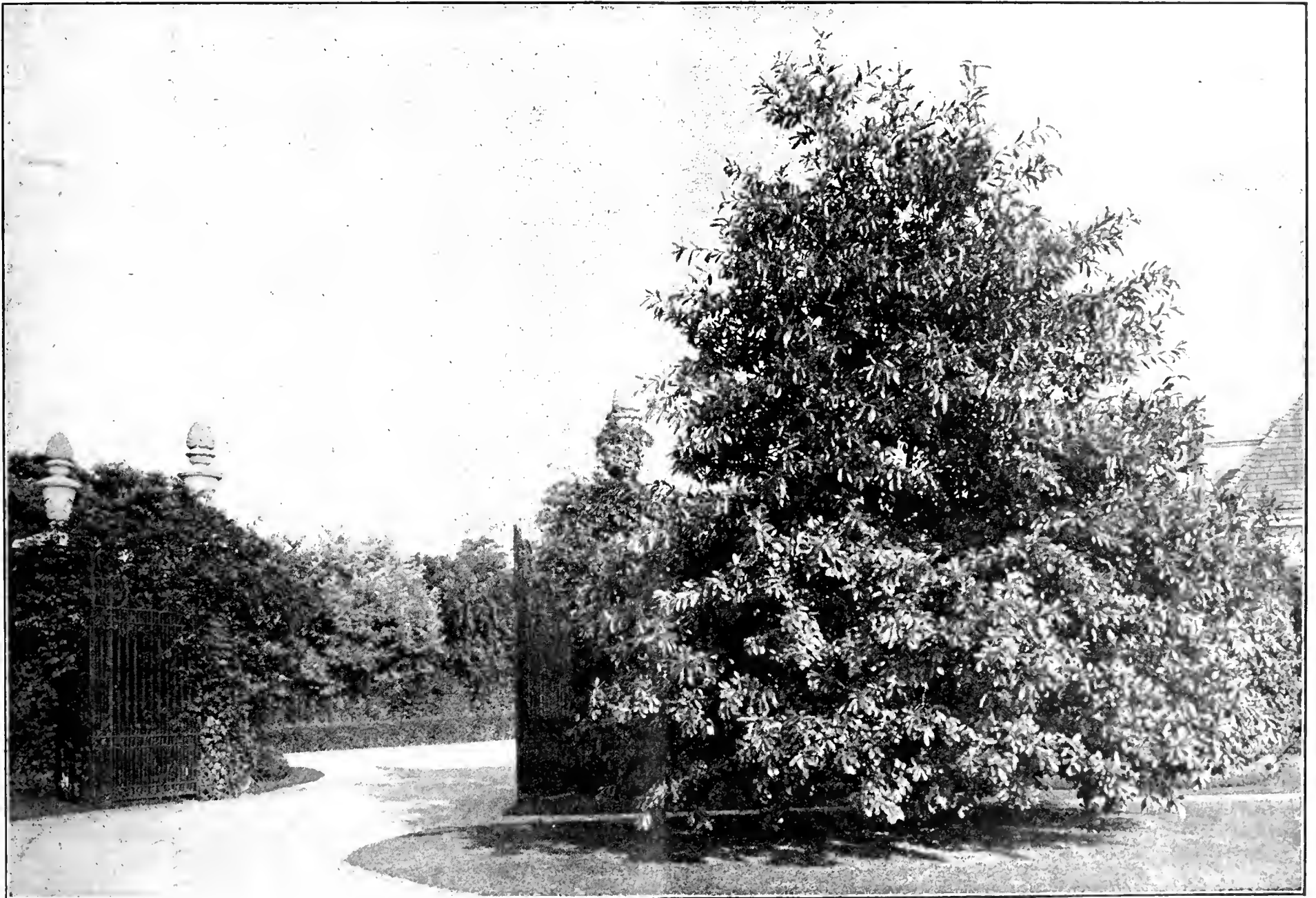
IN our last issue we treated on the planting of an entrance to a building. The present illustration is a simple and dignified planting of a driveway entrance.

Simplicity is always safe and sane and there could be nothing more simple than the planting as shown in our illustration and nothing more appropriate and pleasing.

It consists of an attractive and uncommon tree, *Quer-*

justing and rearrangement, and when they grow large, without skilled attention, usually consist of a number of spoiled plants and an unsightly condition at the most important point of the grounds.

One can picture the entrance shown in the illustration in the next fifty years, with the Oak grown to majestic proportions overarching the gateway, still beautiful and



An effective yet simple entrance planting consisting of a single tree, Quercus imbricaria, and vines on the piers

cus imbricaria, or Laurel-Leaved Oak and vines on the gate piers. How much superior to a mixed planting of shrubbery, evergreens or clusters of trees, so often seen. Groups of plants, however attractively arranged, seldom keep their beauty for many years without constant ad-

the surroundings easily kept neat and clean.

The only drawback is the time it takes to get a good kind of tree well established. The owner of the property is usually too impatient and wants an immediate effect, not realizing that invariably what is gained in

speed is lost in quality. This is especially true of trees. The real good kinds are slow-growing and long-lived and not usually very attractive in their extreme youth. If a customer must have a big show at the entrance immediately, it is good business for the nurseryman to give it to him, but he should plant the "king" tree in a position where it will eventually dominate and be coming to its prime when all the shorter lived plants are deteriorating.

In addition to the oaks, the beech make noble specimens for entrance planting, especially the unusual types, such as the Copper beech, River's Blood-leaved beech and the Cut-leaf or Weeping beech. Among the beech alone there are types and colors to suit any such entrance as illustrated.

However, one never need be at a loss to know what to plant, as any of the uncommon trees that have a good habit are adaptable. The main idea is to have them quite distinct from the general run of trees in the surrounding landscape so as to set off the entrance.

PACIFIC COAST ASSOCIATION OF NURSERYMEN

The Fifteenth Annual Meeting Pacific Coast Association of Nurserymen to be held at Tacoma, Wash., July 11, 12, and 13, 1917

The executive committee has proposed a program which includes the subjects of: "A Landscape Department in the Nurseries;" "Laws Governing Street and Wayside Plantings;" "Grades, Terms and Prices;" and "A Packing Standard" to be given careful consideration and subject to any action deemed best. The educational topics will include "Rose Propagation;" "Nut Tree Production;" "Coast Grown Seedlings;" "Selling Methods;" "Pear Blight" and "Inspection Problems." The reports of Vice Presidents, officers and committees will contain valuable information. The recreation features will include an auto trip through the beautiful residence streets of Tacoma, a visit to the choice Wright and to the famous Pt. Defiance Parks where refreshment will be served; tickets given to the grand Chorus of the United Swedish Saengerfest, in the Stadium which seats over 25,000 people, on the evening of July 12th and a short boat ride on Puget Sound.

At the close of the meeting, it is proposed for those who desire, to make up an excursion for a visit to Paradise Valley, in the Rainier National Park where the Glaciers and the Flower Fields meet, a distance of 56 miles from Tacoma. The round trip fare is about \$6 each person in parties of 10 or more. The trip can be made in one day allowing about 5 hours in going through the park and in Paradise Valley. Price of lodgings in the Park is from 75c to \$1.50 per night, for those who wish to stay longer. Meals at moderate prices.

The Tacoma Hotel, Tacoma, is headquarters for information. Prices of rooms at different hotels will be given in the Badge Book. The executive committee urges that every active nursery on the Pacific Coast be represented at this meeting, as a paying business proposition, to keep in touch for high grade methods in the vocation, and for the much needed rest and recreation afforded.

C. A. TONNESON, Sec. P. C. A. of N.,
Burton, Wash.

PACKING DAYS

By "Red" Colburn

The Nursery Biz is a beautiful game, especially in packing time.

Thru April and May you would like to pray for the good old summer time.

But you don't have time; you're so dog-gone busy
That your feet's off the ground and your head gets dizzy.

There's always several things that's short in dear old packing time,

Sometimes its Roses, sometimes Trees and sometimes Matrimony Vines.

So you take your troubles to Bowden, and your dope to him unload,

And he scratches his head and lies like Hell, when he says, "That's on the road."

Yes there's always something doing in dear old packing time.

It teaches you to swear and pull out your hair, and mistakes, they are a crime.

A customer gets a Crocus bulb instead of a hundred trees,
So he writes right in and bawls you out, says your brains are made of cheese.

Oh! we'd miss you, yes, we'd miss you, our dear old packing time,

For without you we would never know when we're having rosy times,

And when the packing's over without one single tear,
You start in getting business so you can do it again next year.

TREE SEED SITUATION

The tree seed situation is not very promising, as there was a shortage last year and everything was pretty well cleaned up.

It would be interesting to know how the fruit tree seeds that were received as late as March last year have turned out. Previous years growers would not consider receiving crab seed after February, but due to the scarcity they were willing to take it whenever they could get it.

Japan seed was very scarce. French pear was practically non-existent, Keiffer in the usual amount, so that fruit stocks will be sure to be scarce.

There is a promise of a good crop of Mazzard Cherry this season, but the Mahaleb, which comes from France is very uncertain and cannot be depended upon at present.

In regard to the seed of ornamentals, it is too soon to make a forecast of whether there will be a good crop or not, but due to the shortage of labor, which is so very general, it is likely to be very scarce even if there is a good crop, and for this reason every nurseryman should make it a point to collect for himself whenever possible. There are many things that annually go to waste because in normal times it is cheaper and easier to get them from the dealers than to attempt to collect them yourself. It would be a wise precaution this year not to depend too much on others.

ANNOUNCEMENTS

By John Watson, President of the National Association of Nurserymen

To the members of the EXECUTIVE COMMITTEE: A Special Meeting of the Executive Committee is hereby called, to be held in Parlor B, Hotel Adefphia, Philadelphia, on Monday morning, June twenty-fifth, at 9:12 o'clock.

To the Members of the ADVISORY BOARD: You are especially invited and urgently requested to be present at the meeting of the Executive Committee called above. You represent the interests of twenty state and district nursery trade associations, and in considering matters affecting the whole nursery trade, the Executive Committee desire your advice and counsel and co-operation. If another engagement should interfere and prevent your attendance, it will not only be agreeable but it is especially requested that you give a proxy to some other member of your association who can represent your membership in this conference.

To all Chairmen of Committees: You are urgently requested to attend this meeting of the Executive Committee. The Committee, if agreeable to you, will be very glad to know at that time what report you will make to the Convention upon the work assigned to your committee for the year ending; and especially to consider appropriations recommended or required for the continuance of the work of each committee. This information is especially necessary in making up the budget for next year.

To EVERY Member of the Association: I wish to explain why this meeting of the Executive Committee is called for Monday, when the Association meets on Wednesday; an explanation may be unnecessary, but I wish to be sure that there is no possible misunderstanding. Your Executive Committee are a sort of Board of Directors who have to consider many propositions and then offer their conclusions for your action in convention. The seven members of the committee are so widely scattered that it has not been possible to get all the committee together since the last annual convention. At the last two conventions, we were in session not only before the meeting but throughout the convention and the members of the Executive Committee were really deprived of the opportunity to meet their friends and to transact their private business. The majority of them have asked for this advance meeting, pointing out that it will enable the committee to complete the routine work and then to be free to meet their friends when they begin to arrive on Tuesday. The only reason, then, for holding the committee meeting on Monday is to enable the members to enjoy the convention equally with others, something they have not been permitted to do in recent years. They feel sure that the members of the Association will approve of this arrangement.

Every Member of the Association having any matter of business requiring action by the Executive Committee, or having suggestions or advice to offer, will be cordially

welcomed at this committee meeting. The door will be wide open all the time; there is no business that the Executive Committee have to transact in which any member has a greater interest than any other member; their only thought and wish is to do what you want done; and they can't know what those things are unless you tell them. There are no private meetings of this or any other committee of the Association. If you have anything to bring before the Executive Committee, come in and tell us about it, or write to any member of the committee.

DUES. Have you paid yours yet? If not, won't you mail a check to Secretary Smith today? That will insure a number being assigned to you so you will be properly labelled that strangers may identify you at the meeting.

BADGE BOOK. You want to be listed properly; an advertisement placed in the Badge Book will be read by five hundred nurserymen who will hunt you up to buy what you have to sell and to sell you what you want to buy. I mention this, not because of any profit in the advertising because it costs \$5 a page to print it, but because the Badge Book advertising is useful and valuable to the members.

The attendance will be the largest in the history of the Association. Spring business has not been up to the mark, and it will probably not be better next season; but these are reasons for attending our annual conference; many serious problems confront us and they will require our best thought and our soundest judgment, followed by consistent action. I have been in Philadelphia recently, conferring with members of our committees and local nurserymen and I have found indications of a record-breaking attendance. Philadelphia holds an especial interest for all Americans right now: Independence Hall and the Liberty Bell and the house of Betsy Ross who made the first Stars and Stripes.

We nurserymen feel more and more the necessity to get together, to become better acquainted, to realize full the identity of our interests and to work together in harmony and in a spirit of friendly cooperation. It has not been conducive to the cultivation of the "spirit of the hive" for our members to separate themselves into little groups and cliques for their own pleasure; and so it has been decided by the Program Committee to have a Family Dinner the first evening of the convention when we shall all sit down together and enjoy a reunion. Each man will pay for his own dinner, which will cost \$2. The local nurserymen claim the pleasure of having all the ladies present as their guests, and in the same hospitable spirit, they insist upon the privilege of furnishing some music and some other entertainment of a novel sort; and during the evening, of course, we can reasonably expect that our own famous Glee Club will be heard, and that our after-dinner speakers will take their best stories out

of cold storage for the occasion. The Dinner feature is in the hands of a committee consisting of Robert Pyle, Thomas B. Meehan, and Adolf Muller, aided and abetted by several other Good Fellows of Philadelphia, who insist that their city is very wide-awake indeed and not nearly so slow as Baltimore claims. It came about in this wise: The Baltimore man was boasting, naturally, of his city's wonderfully supplied market with its Smith Points, its Red Snappers, and its Green turtles. The Philadelphia man claimed all of those things and the addition of that rare delicacy snails. "Snails!" said the loyal Baltimorean; "why Philadelphia couldn't catch a snail!" Now the Philadelphia nurserymen say that they simply must put us right if we feel that way about the Quaker City. Write any member of the Dinner Committee and say that your wife will be there; and you come too.

And don't put it off. Send a check to Secretary Smith today; and copy for your advertisement in the Badge Book. Make your reservation at the Adelphia Hotel now. The program will be business from start to finish and there will be some serious business for us to transact. We need you and every member we have in the discussion and disposition of this business.

Don't forget: Dues; Badge Book; Hotel; Wife.
June first, 1917.

A VISIT TO THE BUREAU OF PLANT INDUSTRY WASHINGTON, D. C.

Being in Washington, D. C., and having a few hours to spare, I dropped in to see Mr. Peter Bisset, Bureau of Plant Industry, to see if there was anything new that would likely be of interest to nurserymen.

Those who have had correspondence with the Department of Agriculture, must have recognized the kindly courtesy with which all queries are answered, I found the same spirit dominant in personal contact, and was made to feel that the entire knowledge of the Department was at the visitor's service. May be the freemasonry which always exists between true plantmen added to the pleasure, and I came away wondering if nurserymen realized what a splendid organization was working for them, and why they did not make greater use of the information that is there for the asking.

Costly experiments that no private firm could possibly afford are made and the results freely given for the asking.

Plants from all parts of the world tried out and disseminated, some of them no doubt will add much wealth to the country.

It is this part of the work that the nurserymen should keep in close touch.

The Department may be considered similar to an inventor or experimental chemist, only it is not permitted to make a profit by its discoveries. This is left to the private individual who has gumption enough to do it.

Mr. P. H. Dorsett is the chief of the Plant Introduction Gardens and Mr. Bisset has charge of the Plant Distribution. The latter very kindly invited me to visit the field station near Rockville, Maryland, about an hour's ride on the electric cars from Washington, D. C. Yarrow is the field station of the Plant Introduction Bureau for the

eastern section of the country. Others are at Miami, Fla.; Chico, Cal.; and Bellingham, Washington.

The first plant to attract notice was a fine form of *Thuja orientalis* which had evidently stood the winter well. The plants were very uniform, compact and good habit, and fine color. Mr. Bisset informed me they had been raised from seed.

Usually this *Thuja orientalis* is very variable from seed and has to be propagated by cuttings to insure uniform habit.

Another noteworthy evergreen was a tall columnar Juniperus that promises to be a quick growing evergreen of the habit of the Irish Juniper that will attain a height of 15 to 20 feet without spreading.

Ulmus pumila from northern China is a small growing elm that will flourish under very trying conditions of cold and drouth and should prove valuable for the northern section of the middle west.

A hybrid chinkapin—Chestnut which bears good sized nuts two years from the planting of the seed and shows marked resistance to the Chestnut blight suggests great possibilities for the nurseryman.

These are only a few of the many interesting things I saw, before the darkness stopped further investigation, of course, there are a host of economic plants, of not very much interest to nurserymen, and others again that are only valuable in their hybridizing possibilities, but in my short visit I was convinced that here is a field worth cultivating not only for valuable information, but also because there is always the possibility of finding a gold mine.

ANNUAL OUTDOOR MEETING AMERICAN ROSE SOCIETY IN THE NATIONAL ROSE TEST GARDEN (ARLINGTON) WASHINGTON, D. C.

Date deferred to June 4th, (Monday) 1917

10 A. M.

Inspection of 2-acre National Rose Garden.

11 A. M.

Public Meeting.

Chairman, S. S. Pennock, President American Rose Society.

Welcome—Wm. F. Gude, National Representative S. A. F.
"The Significance of the National Rose Test Garden"

J. Horace McFarland, President American Civic Assn.
Response

By Hon. Carl Vrooman, Asst. Sec'y of Agriculture.
Other speakers expected are—

Dr. E. M. Mills, President Syracuse Rose Society.

David Fairchild, Department of Agriculture.

Benjamin Hammond, Secretary American Rose Society.

Dr. D. W. Shoemaker, Rep. Federation of Citizens

Association of Washington, D. C.

Hon. Thomas S. Butler, (If his duties permit)

Congressman from Pennsylvania

Above Subject to Change

Those intending to attend kindly notify:

Wm. F. Gude, 1214 F. St., N. W. Washington, D. C. or
Robert Pyle, Chairman Washington Rose Test Garden
Committee, West Grove, Pennsylvania.

Notes from the Arnold Arboretum

EASTERN ASIATIC CHERRIES. During the last few years the Arboretum has been engaged in studying the Cherry-trees of eastern Asia, and has assembled a large collection of these plants, including most of the species and all the forms with double and otherwise abnormal flowers which are popular garden plants in Japan where the flowering of these trees is celebrated by national rejoicings. All the world has heard of the Japanese Cherry-blossoms, and travellers in the East usually so arrange their journeys that they can be in Tokyo when the white flowers of fifty thousand trees of the Yoshino-zakura (*Prunus yedoensis*) make a day of thanksgiving, and the great trees in the long avenue of Cherry-trees (*P. serrulata*) at Koganei are covered with their rose-colored flowers. Well known to travellers, too, are the avenues of Cherry-trees at Arashi-yama near Kyoto and at Yoshino near Nara. The Cherry-trees which mean so much to the Japanese and delight all foreigners who visit Japan in early spring are perfectly hardy, and easy to grow here in New England; and it is unfortunate that there is no hillside in the Arboretum which can be covered with these trees or no space where a long avenue of them can be planted, for the flowering of a great number of these trees might become as great a joy to the people of Boston as they are in Japan. Such collections of Cherry-trees might well form a part of the equipment for pleasure and instruction in all the northern cities of the country, but up to this time only Rochester, New York, is arranging to make a plantation of these trees to cover many acres of rolling hills in its great park on the shores of Lake Ontario. In the Arboretum only room for a few isolated individuals has been found, but most of the species are now established here and some of them have bloomed for several years. This year the trees promise to produce an unusually large crop of flowers and a visit to them will be well repaid.

PRUNUS CONCINNA. This little Cherry, which was discovered by Wilson on the mountains of central China at altitudes above the sea of from twelve to fifteen hundred feet, is the first Cherry to bloom in the Arboretum this year. In its native forests it is a shrub five or six feet tall, but here it is treelike in habit, although only three or four feet high, with a straight stem, and is now as thickly covered with flowers as it is possible for a plant to be covered. The flowers, which appear before the leaves, are in few-flowered clusters and are white with a wine-colored calyx. The red, lustrous, loose bark of the stem of this Cherry is attractive but as a flowering plant it is less valuable than the Japanese *Prunus subhirtella*, under which name it was once distributed by a London nurseryman. *Prunus concinna* can be seen in the collection of Chinese shrubs on the southern slope of Bussey Hill.

PRUNUS TOMENTOSA. Until this year the earliest of the Cherries to bloom in the Arboretum, *Prunus tomentosa* is

a native of China and a shrub only five or six feet high, and when fully grown in abundant space for the spread of its branches often broader than tall. The flowers open from pink buds as the leaves begin to unfold, and the bright red stalks and calyx make a handsome contrast with the white petals. The small fruit ripens in June and is scarlet, covered with short hairs, and is sweet and of good flavor. This shrub is very hardy and flourishes and produces its fruit in dry cold regions like Alberta and the Dakotas, and in such regions it is possible it may develop into an important fruit-producing plant. *Prunus tomentosa* is a native of northern China and was raised in the Arboretum twenty-five years ago from seed sent here from Peking. A form discovered in western China by Wilson (var. *endotricha*) is also established in the Arboretum. This blooms rather later than the northern plant and the fruit is destitute or nearly destitute of hairs. The white-flowered form much cultivated in Tokyo is not in the Arboretum collection.

PRUNUS SUBHIRTELLA. This is the Japanese Spring Cherry which Mr. Wilson, after a year devoted in Japan to the study of Cherry-trees, calls "the most floriferous and perhaps the most delightful of all Japanese Cherries." It is a large, low-branched shrub rather than a tree and is not known as a wild plant. This Cherry is much planted in western Japan from Northern Hondo southward, but it is not much grown in the eastern part of the Empire and is rarely found in Tokyo gardens. For this reason and as it does not reproduce itself from seed *Prunus subhirtella* is still rare in American and European collections. There are large plants in the Arboretum collection where they have been growing since 1894 and where, covered with their drooping pink flowers, they are objects of wonderful beauty. The value of *Prunus subhirtella* is increased by the fact that the flowers often remain in good condition for ten or twelve days, and longer than those of the other single-flowered Cherry-trees. This Cherry can be raised from soft wood cuttings and by grafting on its own seedlings. These will grow into tall trees with long straight trunks (*Prunus subhirtella*, var. *ascendens*) and in Japanese temple gardens are sometimes fifty feet high with trunks two feet in diameter. This is a common tree in the forests of central Japan, and grows also in southern Korea and central China. Until Wilson's investigations in Japan in 1914 this tree seems to have been entirely unknown in western gardens. Raised from the seeds of *Prunus subhirtella*, which are produced in large quantities every year, it grows here rapidly and proves to be a handsome tree. It has the drooping flowers of the well-known *Prunus pendula* of gardens which is only a seedling form of *P. subhirtella ascendens* and for which the correct name is *Prunus subhirtella* variety *pendula*. This tree is not known to grow wild, but has for centuries decorated

courtyards and temple grounds in central and northern Japan. The largest tree seen by Wilson was sixty-five feet tall with a head as broad as the height of the tree. There is a form of *P. subhirtella* (var. *autumnalis*) with semidouble flowers which blooms in both spring and autumn. This is a shrub often cultivated in Tokyo gardens, and in the Arboretum first flowered in May, 1915.

PRUNUS YEDOENSIS. This is the Cherry-tree which has been most generally planted in Tokyo. It is a small tree with smooth pale gray bark, wide-spreading branches, and large pale pink or white flowers which usually open before the leaves unfold. No old trees are known in Japan, and the origin of this Cherry is uncertain. It has not been found growing wild in Japan, and Wilson after studying it in Tokyo was inclined to believe that it was a hybrid. But, whatever its origin, it is a hardy tree which produces beautiful flowers and should be better known in this country and in Europe. Last year the flower-buds were killed by the winter cold; now the Arboretum tree is covered with them.

PRUNUS SERRULATA, VAR. SACHALINENSIS. This tree, which was called *Prunus Sargentii* until it was discovered that it had an older name, is believed to be the handsomest of the large Cherry-trees of eastern Asia. In the forests of northern Japan and Saghalin it is a tree often seventy-five feet high, with a trunk four feet in diameter; it has large pale pink or rose-colored single flowers, large dark green leaves which are deep bronze color as they unfold with the opening flower-buds and small globose fruits which are bright red at first when fully grown and become black and lustrous when ripe. In western countries this tree was first raised in the Arboretum in 1890 from seeds sent here by Dr. William Sturgis Bigelow, of Boston, and of the trees introduced by the Arboretum there is none of greater beauty. It has been found that the seedlings of this tree are the best stock on which to graft most of the double-flowered Cherries which are so highly prized by Japanese gardeners, and that the reason why these plants have never been successfully grown in the United States or Europe is due to the fact that Japanese gardeners do not use a suitable stock for them. Some seventy-five named varieties of these Cherries with double or otherwise abnormal flowers, cultivated in Japan, are now in the Arboretum where they are being propagated. Among them are fifteen named varieties of the Sargent Cherry, and among these are some of the most beautiful of all flowering trees hardy in this climate and evidently destined, although still little known, to become important features in American gardens. Two of the handsomest of these double-flowered varieties of the Sargent Cherry are the forms *albo-rosea* and *Fugenzo*; the former has large rose-colored flowers changing to white as they open, and the other rose-pink flowers; this is well known in English gardens under the name of *James H. Veitch*. These two Cherries differ from the other Japanese double-flowered forms in the presence of two leafy carpels in the centre of the flowers.

European and North American Cherries bloom a few days later than those from eastern Asia.

SHAD BUSHES. The Arboretum will be gay with the white flowers of these plants soon after this Bulletin reaches its Boston readers. Shad Bushes have been largely used in the plantations along many of the drives,

and the general collection of all species is in the border between the Meadow Road and the parallel walk on the left-hand side entering from the Jamaica Plain gateway. Two of the species are native plants in the Arboretum, *Amelanchier laevis* and *A. oblongifolia*. The first is a tree of considerable size, and an inhabitant of rich upland woods and dry banks. *A. oblongifolia* is a large shrub rather than a tree, although tree-like specimens sometimes occur. It is easily distinguished from *A. laevis* by the silver color of the young leaves which at this season of the year are thickly covered with silky hairs. The earliest of all these plants to flower, *A. canadensis*, is a tree sometimes growing to a height of fifty feet and from *A. laevis* easily distinguished by the covering of pale hairs on the lower surface of the leaves. This handsome tree is distributed from western New York to Louisiana and is the common Amelanchier of the southern states.

SUN SCALD OF FRUIT TREES

The winter injury to fruit trees commonly known as sun scald, in which the sun-exposed side of the trunk is affected. Two other types of injury somewhat related to sun scald are erotch injury and crown injury, or crown rot. In the author's experiments, artificial freezing and thawing at various temperatures were resorted to, their effect on the cambium being noted.

Sun scald injury is considered due to direct freezing to death of tissues through an increased tenderness of the tissue on the sunny side of the trunk in late winter or through a rapid temperature fall which causes the killing of the tissues on the sunny side of the tree at a higher temperature. Both of these factors may be concerned in the injury. Sun scald is considered to be a late winter injury, as distinguished from crown rot, which is perhaps an early winter injury. Sun scald is, therefore, not induced by late growth or an unripened condition of the tree in the fall, while crown rot is undoubtedly due to this condition.

As a result of experiments, the author claims that a practical method of controlling sun scald is to spray or paint the trunks of the trees with whitewash in the fall or early winter. This method is considered more feasible than shading with boards or otherwise.—A. J. Mix, N. Y. Cornell Station.

HUMUS

To be up-to-date one must believe in humus because the scientists tell us it contains plant foods, in spite of the old gardeners' opinion that it was "hungry stuff" and only fit for growing ferns, ericaceous plants, because they need a porous soil and one that was retentive of moisture, and even for these plants you must add some good loam to it, if you wanted good, solid growth.

It is nice and clean to handle, has undoubtedly a good mechanical action on stiff soils, and is fine for milady's flower bed.

For the nurseryman it is questionable if the mechanical action to the soil cannot be secured cheaper by proper working, and fertilizer procured in a cheaper form than by the application of humus.

A Cheap Method of Snow Removal

By John L. Cobbs, Jr.

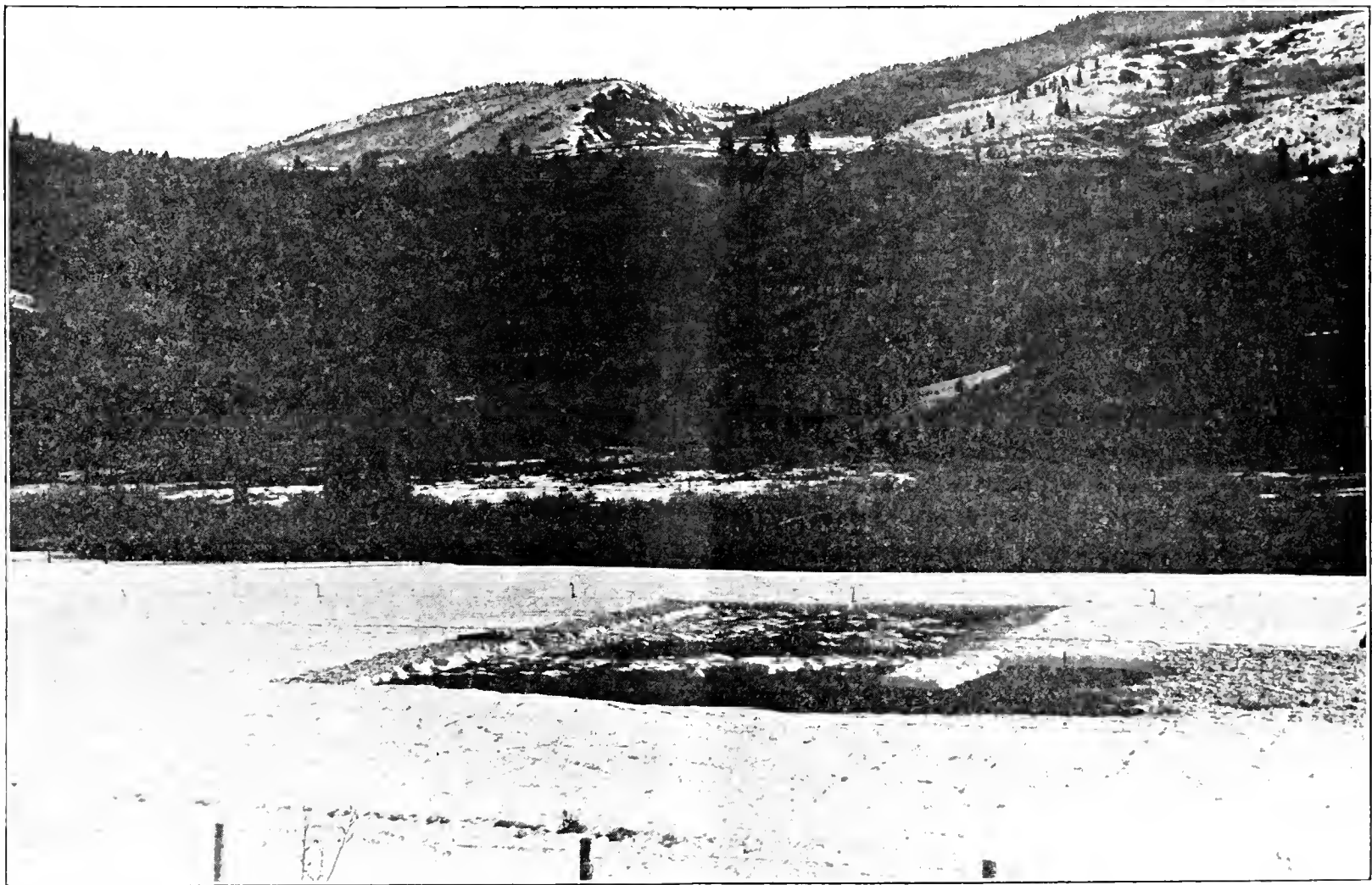
A very important part of the work of the Forest Service of the Department of Agriculture is replanting the burned-over and denuded lands which are contained in the 152 National Forests. About 12,000 acres of these lands are reforested every year and in order to supply the necessary planting stock twenty-one nurseries with a total capacity of more than 37 million young trees are maintained.

The majority of these nurseries are located in mountain valleys of the West where the climate is exceedingly

this is something of a job and entails a considerable expenditure of both money and valuable time.

At the Beaver Creek Nursery, on the Wasatch National Forest, in Utah, which has a capacity of 750,000 plants, it was found that by sowing finely pulverized dirt over the snow the melting was so hastened that shoveling was unnecessary. The first experiments were so satisfactory that they were continued and have been adopted as the official snow removal method.

Each fall sufficient supplies of fine dark soil are stored



On the edges which are poorly defined the soil was sown only one day before the picture was taken, spring 1916. Showing method of snow removal by sowing soil.

rigorous. During the winter, when the thermometer drops far below zero and the snow piles up to a considerable depth, all operations have to be practically suspended.

In some places this heavy snowfall is a rather serious hindrance to early spring planting, since it often happens that the higher bare slopes, where the planting is to be done, are exposed to the sun and warm winds, and are bare of snow long before the valleys in which the nurseries are located. On this account, it frequently happens that the snow has to be removed from the nursery beds in order that the planting may be done at the most advantageous time. With two or three feet of snow,

at the nurseries for use the following spring. At the same time the beds of stock to be used for planting are marked by long stakes in order that they may be easily identified. About two or three weeks before the stock is needed the soil is sown on the top of the snow, just as grain is sown. Hand sleds are used to transport the bulk of the supply, from which a bag slung from the worker's shoulder is filled as needed. By this method one man can remove from three to six feet of compacted snow by one day's work if done sufficiently far in advance. Many commercial nurserymen will doubtless be able to employ this simple practice to uncover stock needed for early planting, or to prevent losses from fungi which work under deep snow late in spring.

INCREASE GRAPE YIELD BY SPRAYING FOR INSECTS AND DISEASES

Grape insect enemies and diseases may be controlled and a good crop of the berries practically assured if a careful spraying schedule is carried out, say A. L. Quaintance of the Bureau of Entomology and C. L. Shear of the Bureau of Plant Industry, of the United States Department of Agriculture. Owners of small orchards and vineyards do not sufficiently appreciate the fact, the specialists point out, that by the expenditure of a little time and money a large proportion of the fruit may be saved, repaying many times the trouble involved in its protection.

The principal insect enemies of the grape are the grape berry moth, the grape root worm, the rose chafer, the grape leaf folder, and the eight-spotted forester, all of which are eating insects; and the grape leafhopper and the brown grape aphid, sucking insects. The principal diseases which attack grapes are black rot, downy mildew, powdery mildew, and anthracnose.

The use of combination spray solutions containing chemicals which act as insecticides or fungicides is advocated by the specialists. The following spray schedule is recommended:

SPRAY SCHEDULE

First application: About a week before the blossoms open or when the shoots are 12 to 18 inches long, spray with Bordeaux mixture, 4-3-50, for fungus diseases, adding 2 to 3 pounds of arsenate of lead paste, or one-half that quantity of the powdered form, for flea-beetle, rose chafer, etc.

Second application: Just after the blossoms fall spray with the same materials as in the first application for the same fungus diseases and insects and for the grape berry moth, grape leaf folder, and adults of the grape rootworm.

Third application: About 2 weeks later use Bordeaux mixture 4-3-50, arsenate of lead paste 2 to 3 pounds, 40 per cent nicotine sulphate 1 part to 1500 parts of the spray mixture, for fungus diseases, berry moth, light spotted forester, grape leaf folder, brown grape aphid, grape rootworm, and grape leaf hopper. To destroy the leaf hopper, direct the spray against the lower surface of the leaves. To control the berry moth thoroughly coat the grape bunches with the spray.

Fourth application: About 10 days later, or when the fruit is nearly grown, if black rot or mildew are still appearing spray with neutral copper acetate or verdigris at the rate of 1 pound to 50 gallons of water.

WHITE PINE BLISTER RUST LEGISLATION IN MINNESOTA

The Minnesota Legislature, recently adjourned, passed the so-called "Blister Rust" bill, giving the State Entomologist certain powers in checking this disease, and also appropriated for his use \$15,000 for the next two years. This appropriation also insured the state's obtaining \$15,000 from federal appropriation, so that Minnesota is well equipped to fight the disease, which is apparently confined to three or four localities close to its eastern boundary.

IMMEDIATE QUARANTINE ON FIVE-LEAVED PINES AND BLACK CURRANT PLANTS FROM THE NEW ENGLAND STATES

The Secretary of Agriculture has amended the white pine blister rust quarantine promulgated April 21, 1917. This amendment is made effective May 1, 1917, and prohibits the movement of white pines and black currant plants from the New England States to points outside of New England. This action was necessitated by the considerable movement now under way of possibly infected white pines, and to a less extent, black currants, from New England to States lying west and south. Both of these plants are important carriers of the blister rust disease, and most of the States to which these shipments were being made have State quarantines prohibiting the entry of such stock.

SOME OF THE LEADING NURSERYMEN IN OR NEAR PHILADELPHIA, THAT THOSE ATTENDING THE CONVENTION WILL HAVE AN OPPORTUNITY TO VISIT.

Andorra Nurseries, Chestnut Hill, Pa.
Thomas B. Meehan Co., Dresher, Pa.
Thomas Meehan & Sons, Germantown, Pa.
James Krewson & Sons, Cheltenham, Pa.
Rakestraw & Pyle, Kennett Square, Pa.
J. W. Thomas & Son, King of Prussia, Pa.
W. H. Moon, Morrisville, Pa.
H. A. Dreer, Riverton, N. J.
H. F. Michell, Andalusia, Pa.
Hoopes Bro. & Thomas, West Chester, Pa.
Morris Nurseries, West Chester, Pa.
Conard & Jones, West Grove, Pa.
Dingee & Conard, West Grove, Pa.
Princeton Nurseries, Kingston, N. J.

Hon. David F. Houston, Sec'y of Agriculture,
Washington, D. C.,

Dear Sir:—

As Vice-President of the AMERICAN ASSOCIATION OF NURSERYMEN and a member of the Executive Committee I wish to have your suggestions as to how the membership of the Association, which covers the entire United States, can aid the Government during the war.

We are, as it were, producers of raw material for food production. I suppose 9-10 of the fruit producing plants and trees which are annually planted in the United States are distributed by the members of our Association.

How can we further assist the Government?

Your immediate suggestions will be greatly appreciated.

Yours very truly,

LLOYD C. STARK.

April Seventeenth, 1917.

Department of Agriculture, Washington.

April 26, 1917.

Mr. Lloyd C. Stark, Vice-President,

American Association of Nurserymen,
Louisiana, Mo.

Dear Sir:—

The sentiment expressed in your letter of April 17th,

with reference to the American Association of Nurserymen rendering assistance to the government in the war emergency is very greatly appreciated.

The pressing need at the present time is to insure a substantial increase in the production of staple non-perishable crops during the present season.

It has been suggested that many of the nurserymen operate large acreages of land on which certain crop rotations are used between the crops of nursery stock which are grown on them. To the extent that corn or other staple crops can be planted this year, in particular, on such land in the crop rotation which has for its ultimate aim the preparation of the land for a new crop of trees, it will help in the food situation.

Those who are growing wheat, corn, cotton, and other staple crops as their main farm enterprise may not be able to increase their usual acreage of these crops to any great extent so that much of the needed increase in the production of these crops will doubtless be realized by the smaller growers devoting more land to them, and by farmers and others who are operating land, putting in substantial acreages of them where they have not heretofore grown these crops. In this latter connection the members of the American Association of Nurserymen can doubtless aid. Even if they grow no more than enough corn, for instance, to supply their own needs where in previous years they have purchased the corn and other grain they have fed their horses, it will amount to considerable in the aggregate and to that extent relieve the draft on the general supply.

As soon as the necessary information can be assembled, it is probable that the importance of preserving by drying, or otherwise, large quantities of fruits and vegetables which ordinarily would go to waste will be emphasized. In disseminating information which will assist the people in this line of food conservation your Association may be able to render substantial aid.

The enclosed outline program adopted at the recent conference at St. Louis may be of interest to you in this connection.

Very truly yours,

D. F. HOUSTON, *Secretary.*

TO IMPORTERS FROM HOLLAND

The S. S. Nieuw Amsterdam left Rotterdam Jan. 31st, but returned there and her cargo of Nursery Stock was not brought to this country. It seems advisable that all Nurserymen having a shipment on that steamer should get together with the object of getting a combined definition of their rights and liabilities. Any further information may be secured from the undersigned.

Thomas B. Meehan,
Dresher, Pa.

VICE PRESIDENT STARK'S OPINION OF FUTURE BUSINESS

Regarding the present and future conditions of the nursery trade, Mr. Lloyd C. Stark, Vice President of the American Association of Nurserymen writes as follows:

I don't know how the conditions in the East have been this year, but our large orchard plantings through the central-west were better this season than for a number of years. Ornamental business also good, but we don't know how the war will affect that. The catalog business will probably be hit some. The agency or salesman's business will suffer perhaps where the salesmen or agents cannot be found in sufficient quantities, but where salesmen are working believe they will be able to do a good business.

The labor situation, of course, is one of the nurseryman's big problems. The freight situation is also another



LLOYD C. STARK, Louisiana, Mo.,
Vice President of the
American Association of Nurserymen.

problem, however, these like all other problems will be solved somehow.

I note a tendency towards pessimism in some quarters. This to my mind is all dead wrong. Now is the time to be conservative, of course, but pessimism won't help and it will hurt a lot. There are, on the contrary, many causes for optimism in nursery circles.

First and foremost the farmer who buys most of the nursery products is a favored son as never before; both the government and the banks are holding him up and the government will undoubtedly supply him with labor. On the other hand, the man who plants ornamentals in a large way, in many cases has more money than ever before, and he will probably continue to buy. The first year will probably be worse than the succeeding ones if Canada furnishes us a fair example. In the meantime, we nurserymen must do what we can to line up the agricultural colleges, the agricultural publications, the Department of Agriculture, etc., and get them to urge production and conservation of fruit food products and incidentally this will help the planting of orchards.

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THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
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EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in Nursery Stocks of all kinds. It circulates throughout the United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance	\$1.50
Foreign Subscriptions, in advance	\$2.00
Six Months	\$1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements. Drafts on New York or postal orders, instead of checks, are requested by the Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be addressed, Editor, Flourtown, Pa., and should be mailed to arrive not later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., June 1917

THE COMING CONVENTION

Portentious changes are taking place. men and women are giving their lives, energy, time and money freely and unselfishly to support ideas in which they believe. The old order of things in the business world, when might made right, is being severely shaken and there are many who believe, and not without reason, that future success will depend on a broad cooperation rather than the methods and policy usually practiced by a closed corporation.

The rebirth of the American Association of Nurserymen two years ago, was caused by a conviction that something must be done to raise the standard of the nursery business to a plane where it belongs.

The past two years have developed the organization and concentrated the thoughts of its members on its many problems.

The coming convention will be an important one, and will decide the future policy of many important issues.

It is the duty of every nurseryman to attend, and help to decide what such policy shall be.

THE PRESENT INTEREST IN GARDENING

President Wilson's request, for all to do their utmost to increase the food production by raising crops, has been responded to nobly. Hundreds of acres have been added to the cultivated area in the different states. Around large cities, it is especially noticeable, land that laid idle for years has been broken up and worked, and no one is too rich or too poor to take interest in the movement. Hundreds of people are beginning to take an interest in growing things, that never did before. Could a horticultural advertising expert ask for a more successful and widespread propaganda to create interest in the productions of the seedsman, florist and nurseryman? It is truly fertilizing the field of future endeavor, and if the

nursery business and allied trades allow the awakened interest to lapse they are simply throwing away an opportunity that may never occur again.

NOW IS THE TIME FOR NATIONAL ADVERTISING

While the times are so upset, there is a tendency to hold back and wait events rather than go forward with confidence in the future. Which-ever way you look at it, this is a poor policy for the nurseryman. His goods take too long to produce, one to eight years or more, so there is every reason why he should not hold back.

It is the enterprising man who takes a long look ahead, that is prepared with the goods to sell when the demand comes, that wins out.

To those with a pessimistic turn of mind who are looking for the worst, chaos and disaster in the future, we would suggest it is much better to meet such conditions with a good stock on hand than sit down and help such conditions to arrive.

The nurseryman's products are largely essentials and as such the demand is likely to increase rather than diminish. Eat we must and if there is a shortage of one kind of food there will be more used of another. It is recognized there is a shortage of wheat, potatoes and meat, what better conditions could be asked for encouraging a larger consumption of fruit? And instead of slack-ing in our efforts to do business take advantage of the present psychological time and teach the whole world the value of fruit as a food.

Now is the time for the nurserymen and orchardist to do some advertising that will make the public eat apples and other fruit in preference to beef steak and potatoes and once the public gets the habit, they will never lose it.

Never mind about the Railroad situation, the labor situation, they will be settled without the nurseryman worrying about them.

The one big job before the nurseryman at present is to create a market for his products, there will be no demand for the fruit trees unless there is a demand for the fruit.

While the nation's stomach is empty it is in the best possible condition to be taught the value of fruit as a food.

EXCERPTS TAKEN FROM BULLETIN NO. B-30 OF THE AGRICULTURAL AND MECHANICAL COLLEGE OF TEXAS NOV. 1916

By W. B. Lanham, Horticulturist and Chief, Division of Plant Industry—Extension Service—entitled

"HOME ORCHARDS IN TEXAS" and table:

"The production of fruit in the state has decreased in recent years. All the fruit grown in 1909 was 58.8 per cent. less than was reported by the census 10 years before, while during the same period the population increased 27.8 per cent. and the number of farms 18.6 per cent.

Something is radically wrong when the production of fruit drops more than one-half in 10 years and during that time the population increases more than one-fourth. Throughout the state little attention has been given to orchards after planting and still less to markets are preparing fruit for shipment.

The value of fruits as food has been under-estimated. Figures taken from FARMERS' BULLETIN No. 293, showing the amount of heat or energy units that can be purchased

for 10 cents in various kinds of fruits, as compared with porterhouse steak, are given below:

FOOD VALUE OF MEAT AND FRUIT COMPARED.

Porterhouse Steak	444	Calories
Apples	1467	"
Grapes	837	"
Peaches	349	"
Blackberries	386	"
Figs—dried	988	"

This shows that we are getting good value for our money when we buy fruit as food, but its greatest value is not in the amount of energy, but in the tonic and stimulating effect that it possesses.

The Pennsylvania Railroad says:—

"A trifle more than 3½ cents per week would cover the entire increase in freight charges on all the food consumed in seven days by a typical well-fed American family of five people, if the pending requests of the Railroads for advanced rates are granted.

"Greater efficiency in distributing food, resulting from the improved railroad facilities that would be made possible by adequate rates, would wipe out that increase many times over."

Help the railroads to get improved facilities so they can help distribute the fruit, co-operate in every conceivable way to encourage consumption and demand for fruit and by so doing you will be building your own business and have little time for pessimistic forebodings of the future.

President John Watson has one big problem in mind that he is constantly agitating with the hope that energetic action to solve it will be taken at the coming conven-



JOHN WATSON, Newark, N. Y.,
President of the
American Association of Nurserymen.

tion, and that is, how to co-ordinate production with demand and so avoid so much surplus and waste.

There are two ways by which this may be done. To either limit the production to the demand by statistics and

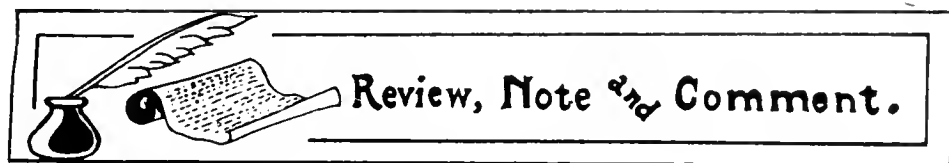
co-operation among the growers or to increase the demand by co-operative national advertising.

Perhaps both could be made to work for the desired result.

The subject is so vital to the trade that every one should be heart and soul with Mr. Watson in helping to accomplish his aims.

Mr. Watson in a letter to the "National Nurseryman" on the subject says:—

I can't get the idea out of my head that we ought not to be growing a lot of stock without some systematic preparation for its sale instead of burning it in the spring. You know it is nothing less than a crime, this burning up stock. I never saw so many brush-piles; I never saw so many full cellars, nor so many blocks left in the field. I have seen some really fine blocks of trees given away for the digging and just to get the land cleared. Some renting nurserymen, growing fruit trees, actually abandoned their stock. Now, all of this indicates that there is something wrong somewhere. We can see what a little publicity will do. Look what it meant for the Seedsmen this spring. Go out and try to buy a few seeds for your kitchen garden. Look what the florists did Sunday. That full page advertisement in the Literary Digest ought to be a revelation to the nurserymen. It didn't advertise any particular florist or any particular locality. It talked about flowers for Mother's Day. It would be interesting to know how many thousands of people acted on their impulse after reading that page.



Control of pear scab, R. E. SMITH (*California Sta. Circ.* 157 (1916), pp. 4, figs. 5).—Suggestions are given for the control of pear scab, plowing under of the dead leaves and two sprayings with Bordeaux mixture as the buds are unfolding being recommended. As an extra precaution a third spraying, with Bordeaux mixture to which lead arsenate has been added for codling moth control, may be given.

Peach scab and its control, G. W. KEITT (*U. S. Dept. Agr. Bul.* 395 (1917), pp. 66, pls. 6, figs. 6).—The results of laboratory and field investigations on peach scab, due to *Cladosporium carpophilum*, and its control are given. Peach scab is said to occur in practically every important peach-growing district in the United States east of the Rocky Mountains, and its presence has also been recorded in Canada, Europe, Australia, and South Africa. The characteristics of the disease are given, and the life history of the organism is described.

Inoculation experiments with single spore strains of the fungus from the fruit of the peach and from twigs and leaves gave typical infections in every case, with the exception of the leaf strain inoculated upon the fruit. Scab infection naturally appears shortly prior to the ripening period of the earlier varieties and may continue throughout the season. Primary infection is said to be produced by conidia from overwintered twig lesions. The fungus overwinters in the mycelial stage on living twigs

and no evidence has been found of any other type of overwintering that is of practical importance in the life history of the parasite, although it has been shown that the mycelium may survive the winter on fallen fruit and twigs. The varying resistance of different varieties of peaches to scab is pointed out, and as a result of the experiments of the author and others, it is claimed that it may be satisfactorily controlled by spraying with self-boiled lime-sulphur or with finely divided wettable sulphur.

Grape anthracnose in America. C. L. SHEAR (*Off. Rpt. Sess. Internat. Cong. Vit., 1915, pp. 111-117, figs. 4.*)—The author states that while grape anthracnose due to *Sphaceloma ampelinum* has apparently not been found on wild grape-vines native to this country, it is known to attack varieties derived from our native species. A resemblance noted between the anthracnose fungus of the grape and that of some species of *Rubus* has suggested the possibility of a close relation or identity of the causal organisms, which is to be investigated.

The unpleasant features of the iron sulphate and sulphuric acid treatment are said to be obviated by the use of the effective combined lime-sulphur and Bordeaux mixture treatment which has been worked out by Hawkins (*E. S. R., 28, p. 649*). This proved to be successful when used in connection with removal of diseased material.

Mr. Meredith Reed, son of William C. Reed, Vincennes, Indiana, the well known nurseryman, and Miss Alsop, daughter of Dr. and Mrs. George R. Alsop, were united in marriage April 25 at the bride's home.

Mr. Reed expects to take up the officer's training work at Culver, preparatory to taking examination as an officer in the Reserve Corps of the U. S. Army.

BUY A LIBERTY BOND

Regardless of what may be a man's opinions or politics his duty is plain enough. The government needs a loan and calls on citizens to subscribe. The bonds are easy to obtain, are non taxable, and one of the safest investments that can be made.

Application forms may be had from the Treasury Department, Washington, D. C., or any bank.

Now the people are so interested in gardening the nurseryman should do everything to keep them from losing it.

There are lots of potential customers among those trying to raise vegetables for the first time.

A person that makes a success in growing a tomato plant this year may want to plant a rose bush and an apple tree next.

Stuart Perkins, a son of George C. Perkins, has entered the officers' training camp at Madison Barracks, Sackett's Harbor, N. Y. and commenced duty there last week.

Mr. George C. Perkins, of Jackson & Perkins Co., Newark, N. Y., has left for a trip to California and other Pacific coast points, expecting to be gone five or six weeks.

BOOK REVIEW

THE BOOK OF THE PEONY

The J. B. Lippincott Company, Philadelphia, has published "The Book of the Peony" by Mrs. Edward Harding. It is a very handsome work and does credit to the subject, being an appreciation from the amateur's standpoint rather than a technical work. It is beautifully illustrated, with twenty-three half tones and twenty plates in full color. It covers its subject from the mythology of the peony to the best varieties to grow and their propagation, culture and diseases, together with their remedies.

While perhaps it is hardly a work which will appeal to the nurseryman, it should find a good sale among lovers of this popular flower.

The price of the book is \$6.00 net, postage extra.

HOME LABOR-SAVING DEVICES

J. B. Lippincott Company, Philadelphia, Pa., have published a very useful book under the title of "Home Labor-Saving Devices," by Rhea C. Scott, district agent for home demonstration in Virginia. It is illustrated by Mrs. R. E. Gamble. It sells for the price of \$1.00 net.

It shows how to construct those devices or conveniences that are in common use and yet add so much to the joy of living, especially to the country home. It is a very practical book. The drawings and cuts supplement the instruction in such a way that any one can follow them. For instance, in the making of the fireless cooker, list of materials is given, dimensions, and directions how to construct. It is an excellent book for the boy or man who has a little time to spare and is willing to use it for the benefit of the home.

The Yearbook of the Department of Agriculture for 1916 is being distributed. It is well bound and illustrated and contains much valuable information.

The chapters most likely to interest nurserymen are "Color as an Indication of the Picking of Fruits and Vegetables." By P. H. Dorsett.

"Suppression of the Gipsy and Brown Tailed Moths and Its Value to States not Infested." by A. F. Burgess.

"Co-operative Work for Eradicating Citrus Canker," by Karl F. Kellerman.

"The Practical Use of Insect Enemies of Injurious Insects," by L. O. Howard.

"The Stable Manure Business of Big Cities," by C. C. Fletcher.

"Destroying Rodent Pests on the Farm," by David E. Lantz.

"Pumping for Irrigation on the Farm," by P. E. Fuller.

PHILADELPHIA

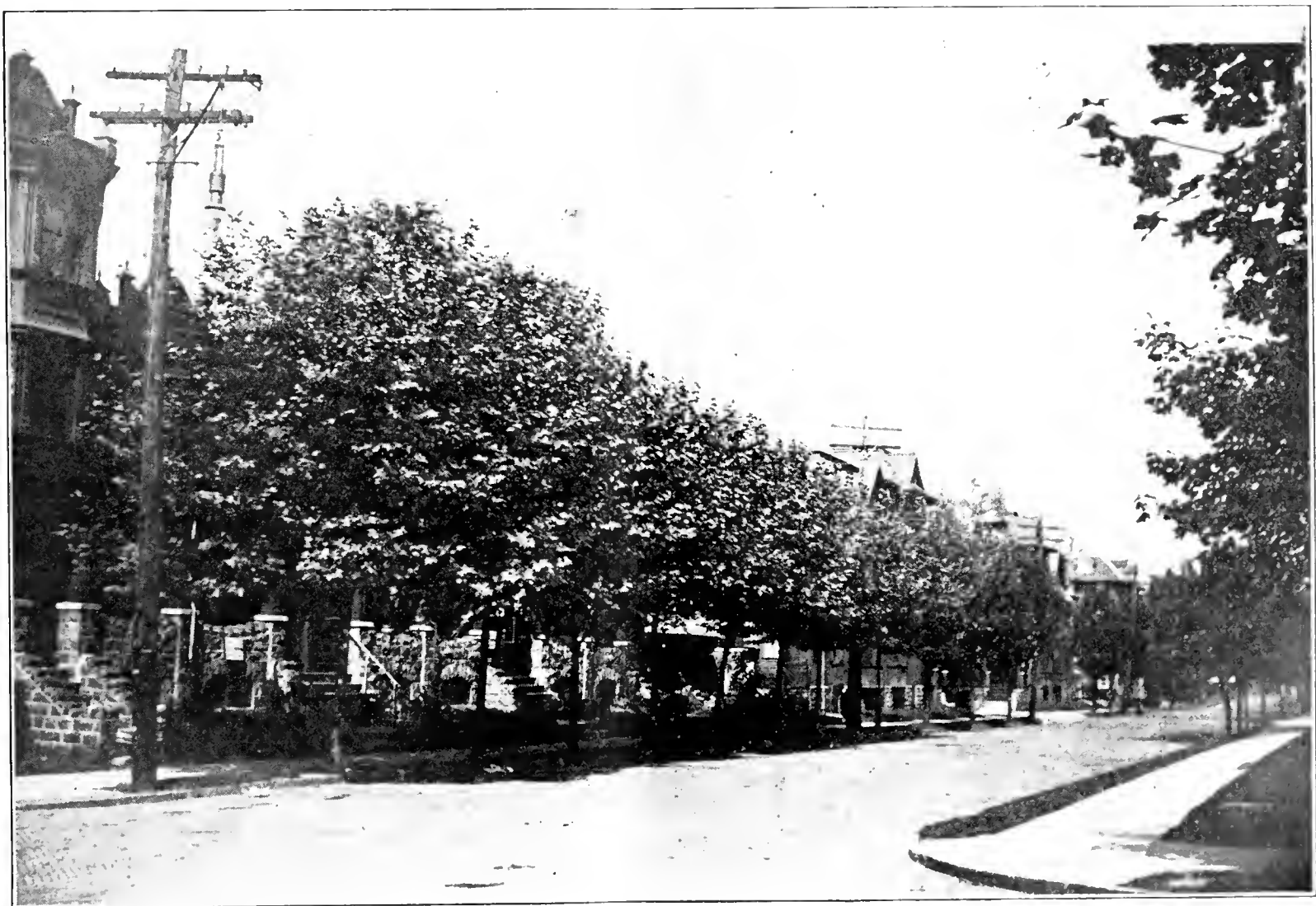
By Samuel Newman Baxter, City Arboriculturist

In coming to Philadelphia for the convention, the American Association of Nurserymen will visit a city which has been most liberal in its patronage of their products.

Since the days when William Penn, the founder, declared that it should be a "greene country towne;" through the time of John Bartram, who discovered that rare Franklin tree (*Gordonia pubescens*) and the late Thomas Meehan, "Father of City Squares," Philadelphia has been a lover of plants.

When a few years ago control of the street trees was accepted by the Park Commission, in accordance with

dominate, but the bad habits of this tree are now generally known and its planting is discontinued; Silver Maples were plentiful and some splendid avenues of this tree exist today, but it is not being planted to any extent; Oriental Plane is popular with the building operators and has been planted extensively, especially in West Philadelphia section; Norway Maples, Pin Oaks and next in popularity follow the Lindens, Elms, Ginkgo and Sugar Maple. Red and Scarlet Oaks are too scarce at present to meet the demand. With Lindens the American is least desirable, European, yellow twig and silver-leaved being used. The latter seems to hold its foliage better



A handsome row of young Norway Maples on a Philadelphia Street

the law, a systematic census was taken and so well had the property owners contributed toward a "greene country towne" that 127,301 trees were recorded and plotted on the sidewalks. This number—and it is now nearer 140,000—is probably greater than that of any city in the world of which there is a record; certainly more than Paris, France, famed for its shade trees, and exceeds that of Washington, D. C., regarded as a pioneer city in this country to adopt municipal control of street trees. Appropriations for maintenance in these two cities, however, are far in excess of Philadelphia's.

The census referred to showed Carolina Poplars to pre-

dominate and longer and stands up well under adverse city conditions.

The caterpillar-proof tree, Paper Mulberry (*Broussonetia papyrifera*) though not planted much now, abounds in Kensington section and any objection to its fruit is nil because in thousands of trees there are but one or two known pistillate forms. In fact, both flower and fruit of the female form are attractive and, due to its scarcity, regarded as rare.

These are but a few of the more popular varieties but to the nurseryman who is interested in noting the adaptability of many varieties not generally used as street

trees, Philadelphia offers a field for observation. True, not in quantities, perhaps, but here and there scattered about the city may be found specimens of practically all trees which appear in the nursery catalogs. Many are far from appropriate, like stag-horn sumac (*Rhus typhina*) and Chinese Cork tree (*Phellodendron*), but though ill advised, nevertheless interesting and indicative of the love of trees which prompted their planting.

Sweet Gum, Cucumber Magnolia, Cedrela, Ash, Red Maple, Horse-Chestnut, Tulip Poplar, Birch, deciduous Cypress, Catalpa, Kentucky Coffee tree, Empress tree, Buckeye, Sophora and many others may be seen.

Flowering trees, where conditions permit of adoption, are being planned for and among these may be mentioned, Magnolias, Dogwoods, Varnish tree, Hawthorns, Locusts, Flowering Cherry and Crab Apples.

And so, while visiting nurserymen should not expect to see tree-lined streets in the heart of the city, which is possible only with liberal appropriations and several years construction and maintenance, nevertheless a visit to the suburban sections will show how Philadelphia, in numbers at least, leads other cities with street trees.

PROGRAM AMERICAN ASSOCIATION OF NURSERYMEN, PHILADELPHIA, PA., JUNE 27—29, 1917

WEDNESDAY, JUNE 27TH.

9.30 A. M.

Call to order by the President.

Address of Welcome:

City of Philadelphia—Hon James Edward Cattell.

Chamber of Commerce—President Ernest T. Trigg

Response—By a member of the Association.

President's Annual Address—John Watson, Newark, N. Y.

Report of Secretary—Curtis Nye Smith, Boston, Mass.

Report of Treasurer—Peter Youngers, Geneva, Nebr.

Address—Hon. Champ Clark, Washington, D. C.

Reports of Committees.

Hail Insurance—Frank A. Weber, Chairman,

Nursery, Mo.

Nomenclature—J. Horace McFarland, Chairman,

Harrisburg, Pa.

Standardization—Harlan P. Kelsey, Chairman,

Salem, Mass.

Landscape—W. H. Wyman, Chairman,

North Abington, Mass.

Publicity—F. L. Atkins, Chairman, Rutherford, N. J.

Telegraphic Code—R. C. Chase, Chairman, Chase, Ala.

Transportation—Chas. M. Sizemore, Chairman,

Louisiana, Mo.

Appointment of Committees.

Adjournment.

2:30 P. M.

Executive Session

Report of Counsel—Curtis Nye Smith, Boston, Mass.

Reports of Committees:

Legislation—Wm. Pitkin, Chm., Rochester, N. Y.

Arbitration—W. C. Reed, Chm., Vincennes, Ind.

Distribution—M. R. Cashman, Chm., Owatonna, Minn.

Tariff—Irving Rouse, Chm., Rochester, N. Y.

Note:—After each report time will be allowed for discussion.

Two Years Under the New Constitution—

Henry B. Chase, Chase, Ala.

Discussion—Led by Lloyd C. Stark, Louisiana, Mo.

Expending Association Funds to Guarantee Largest Possible Returns—J. W. Hill, Des Moines, Ia.

Discussion—Led by Irving Rouse, Rochester, N. Y.

The Paramount Question: How to Make the Nursery Business Feed and Clothe Us and Pay Our Debts—

John Dayton, Painesville, Ohio.

Discussion—Led by R. C. Chase, Chase, Ala.

Standardization—Cooperation, Organization—

J. R. Mayhew, Waxahachie, Texas.

8.00 P. M.

A dinner will be arranged for members and their wives where all can dine together.

Thursday, June 28th, 9.30 A. M.

9.30 to 11.00—Nurserymen's Publicity—

J. Horace McFarland, Harrisburg, Pa.

11.00 to 12.30—Sales Promotion—Advertising—

Irvin F. Paschall, Philadelphia, Pa.

Robert Pyle, West Grove, Pa.

2.30 P. M.

Executive Session:—

Prices Wholesale and Retail: In the Face of Unprecedented Advance in Labor, Supplies, Etc., Are We Not Forced to Raise Prices—How?

F. H. Stannard, Ottawa, Kans.

W. W. Hoopes, West Chester, Pa.

The Relations of Wholesaler and Retailer: Would the Interests of Either or Both be Better Served Through Separate Organizations?—

M. R. Cashman, Owatonna, Minn.

Open Discussion.

Prohibition of Importation of Nursery Stock—

E. S. Welch, Shenandoah, Ia.

Discussion—Led by Jas. McHutchison, New York, N. Y.

Modern Business Efficiency and Practice—

Wm. P. Stark, Neosho, Mo.

The Future in Ornamentals—John S. Kerr, Sherman, Tex.

Evening:

7.30—A meeting of State Vice-Presidents will be held. Members are urged to consult together and name their choice for Vice-Presidents.

8.00—Meeting of American Nurserymen's Protective Association, Thomas B. Meehan, Sec'y.

8.30—Meeting of American Retail Nurserymen's Protective Association—Guy A. Bryant, Sec'y.

Friday, June 29th, 9.30 A. M.

Address—Hon. David F. Houston, Secretary of Agriculture, Washington, D. C.

When are Evergreens (if Ever) Dormant?

J. B. Baker, Fort Worth, Texas.

Discussion—

Maintenance of Soil Fertility—

Milton Moss, Huntsville, Ala.

2.30 P. M.

Selection of Place for Next Meeting.

Election of Officers.

Unfinished Business.

Adjournment.

EXHIBITS AT THE CONVENTION

The Committee on Exhibits expects to have this year the largest and finest exhibit that we have ever had at any convention of the American Association of Nurserymen.

Up to the present time we have received and have booked up more reservations for space than we have ever had before at this time, and the general letters to members asking them if they wish to exhibit have only just been sent out.

The committee therefore requests that any member of the association desiring to exhibit his product at the annual convention get in touch with one of the members of the committee who will be glad to make reservation for them and give any other information desired.

E. HORTON BOWDEN,

G. HALE HARRISON,

ALBERT F. MEEHAN, *Chairman*.

SPRAY MAY BEETLES; PREVENT GRUB DAMAGE

Larvae of These Flying Insects May be a Serious Pest Next Spring.

If the common brown May beetles, otherwise known as "June beetles" or "June bugs," are numerous this spring, it means a serious infestation of white grubs next season. The grubs, which do their damage by feeding upon the roots of grasses, corn, potatoes, strawberries, and seedling trees, especially conifers, are the larvae of these May beetles. Most of them live in the ground for three seasons before they change into beetles, becoming larger as they mature. The entomologists of the United States Department of Agriculture prescribe these methods of eradicating this pest in each stage of its infestation:

When heavy flights of May beetles are noticed, spray trees with an arsenical, such as Paris green or arsenate



Platanus orientalis is a popular street tree in Philadelphia.

STANDARDIZED PLANT NAMES

The American Joint Committee on Horticultural Nomenclature have published their official code of Standardized Plant names. It is being distributed through the Secretary, Harlan P. Kelsey, Salem, Mass., price twenty-five cents.

Few of us care to change the name of a plant after it has become familiar to us, but everyone should help along the good work done by this committee and adopt the names as suggested. It is the only way to secure uniformity and if every nurseryman follows the list as given when making up their catalogues, it will not be long before the present confusion would be largely overcome.

of lead, to poison beetles feeding thereon. Plow grass and small-grain land previous to October 1, to destroy young grubs recently hatched from eggs laid by May beetles.

When small grubs are abundant in the fall, pasture hogs. Plow thoroughly previous to October 1. Seed such land to small grain or clover for the following year. Do not plant corn or potatoes on such land the following season. Allow chickens the run of fields when plowed.

When small grubs are abundant in the spring, seed such land to small grain or clover. Do not plant corn or wide-row crop in such land. Put corn, potatoes, field beans, etc., on ground which has been cleanly cultivated the preceding year. Pasture hogs on infested ground,

and give chickens the run of fields when plowing and cultivating.

When large grubs are abundant in the fall or spring, plow infested land about October 1. Delay planting until the 15th or 20th of May, or a little later if practicable. Ground containing large grubs in spring should be plowed as soon after July 15 as practicable, as indicated below. Pasture hogs in infested fields wherever practicable.

When beetles or pupae are in the ground in summer, plow thoroughly, so as to break clods, any time after July 15; the sooner after that date the better. Pasture hogs in infested fields.

"WELCOME TO PHILADELPHIA"



*Welcome! You from the historic East,
A warm welcome waits for you,
Our hats we'll doff to Culture's fame,
And trade a thing or two.*

*Welcome! You from the virile West,
A warm welcome waits for you,
Old Philly's slow, we need the "go"
You'll bring with ideas new.*

*Welcome! You from the sterling North,
A warm welcome waits for you,
We need your goods, we need your help,
And we need your money too.*

*Welcome! You from the Sunny South,
A warm welcome waits for you,
There's liquid for your historic drought
And a hand clasp good and true.*

AMERICAN ASSOCIATION OF NURSERYMEN

President—John Watson, Newark, N. Y.

Vice-President—Lloyd C. Stark, Louisiana, Mo.

Treasurer—Peter Youngers, Geneva, Neb.

Attorney and Secretary for the Association—Curtis Nye Smith, Boston, Mass.

Executive Committee—John Watson, Chairman, Newark, N. Y.; J. B. Pilkington, Portland, Oregon; John H. Dayton, Painesville, Ohio; Henry B. Chase, Chase, Alabama; Theodore J. Smith, Geneva, N. Y.; J. R. Mayhew, Waxahachie, Texas; E. S. Welch, Shenandoah, Iowa; Lloyd C. Stark, Louisiana, Missouri.

CHAIRMEN OF COMMITTEES

Arrangements—Thomas B. Meehan, Dresher, Pa.

Arbitration—W. C. Reed, Vincennes, Ind.

Exhibits—Albert F. Meehan, Dresher, Pa.

Program—J. R. Mayhew, Waxahachie, Texas.

Report of Proceedings—Curtis Nye Smith, Boston, Mass.

Nomenclature—J. Horace McFarland, Harrisburg, Pa.

Tariff—Irving Rouse, Rochester, N. Y.

Press—Ralph T. Olcott, Rochester, N. Y.

Telegraphic Code—R. C. Chase, Chase, Ala.

Hail Insurance—Frank A. Weber, Nursery, Mo.

Publicity—F. L. Atkins, Rutherford, N. J.

Distribution—M. R. Cashman, Owatonna, Minn.

Legislation—William Pitkin, Rochester, N. Y.

Transportation—Charles M. Sizemore, Louisiana, Mo.

Landscape—W. H. Wyman, North Abington, Mass.

STATE AND DISTRICT ASSOCIATIONS

American Nurserymen's Protective Association—President, Irving Rouse, Rochester, N. Y.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.

American Retail Nurserymen's Protective Association—President, H. W. Marshall, Arlington, Nebraska; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.

Association Oklahoma Nurserymen—President, P. W. Vaught, Holdenville, Okla.; secretary, Jim Parker, Tecumseh, Okla. Next meeting during week of State Fair at Oklahoma City, last of September or first of October.

California Association of Nurserymen—President, John S. Armstrong, Ontario. Secretary, H. W. Kruckeberg, Los Angeles, Cal.

Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.

Connecticut Nurseryman's Association—President, Walter E. Campbell, New Haven, Conn.; secretary, F. L. Thomas, Manchester, Conn.

Idaho Nurserymen's Association—President, Anton Diedricksen, Payette, Idaho; secretary, J. F. Litooy, Boise, Idaho. No definite time has been set for next meeting. Probably in July at Boise, Idaho.

Massachusetts Nurserymen's Association—President, G. Howard Frost, West Newton, Mass.; secretary, Winthrop H. Thurlow, West Newbury, Mass.

Mississippi Nurserymen's Association—President, Theodore Bechtel, Ocean Springs, Mississippi; Vice-President, S. W. Crowell, Roseacres, Mississippi; Sec'y-Treas., R. W. Harned, Agr. College.

National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.

New England Nurserymen's Association—President, Harlan P. Kelsey, Salem, Mass.; Secretary, Charles Adams, Springfield, Mass. Annual meeting held on the last Tuesday in February.

New Jersey Association of Nurserymen—President, Carl H. Flemer, Springfield, N. J. Secretary-Treas., A. F. Meisky, Elizabeth, N. J.

New York State Nurserymen's Association—President, E. S. Osborne, Rochester, N. Y.; secretary, H. B. Phillips, Rochester, New York. Next meeting September. Probably at Utica.

Ohio Nurserymen's Association—President, T. J. Dinsmore, Troy, Ohio; secretary, W. B. Cole, Painesville, Ohio.

Oregon—Washington Association of Nurserymen—President, C. F. Breilhaup, Richland, Wash.; secretary, C. A. Tonneson, Tacoma, Wash.

Pacific Coast Association of Nurserymen—President S. C. Miller, Milton, Oregon; secretary-treasurer, C. A. Tonneson, Tacoma, Wash. Place of next meeting to be decided later.

Pennsylvania Nurserymen's Association—President William Warner Harper, Philadelphia. Secretary, Henry T. Moon, Morrisville, Pa.

Southern Nurserymen's Association—President, Harry Nicholson, Winchester, Tenn.; secretary-treasurer, O. Joe Howard, Pomona, N. Carolina.

Tennessee Nurserymen's Association—President, A. I. Smith, Knoxville, Tenn.; secretary-treasurer, G. M. Bentley, Knoxville, Tenn.

Tennessee State Florists' Association—President, Karl P. Baum, Knoxville, Tenn.; secretary-treasurer, G. M. Bentley, Knoxville, Tenn.

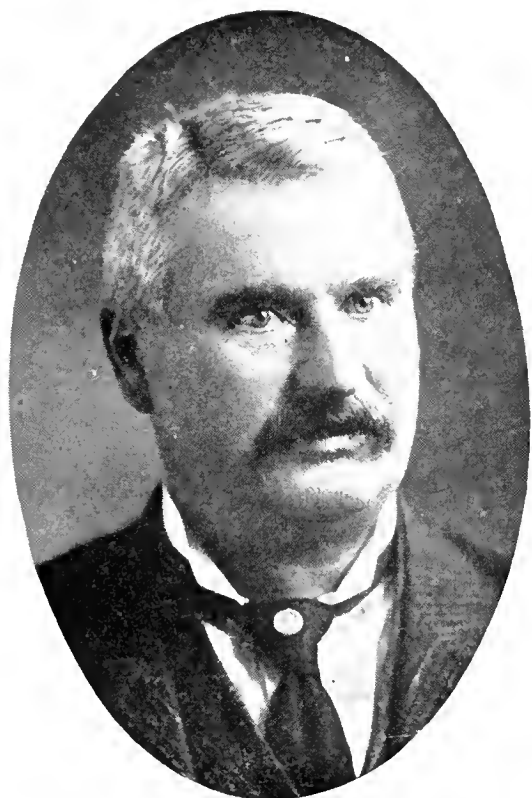
Texas Nurserymen's Association—President, William B. Munson, Denison, Texas; secretary-treasurer, J. M. Ramsey, Austin, Texas.

Western Association of Nurserymen—President, Lloyd C. Stark, Louisiana, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

SOMETHING NEW AT THE PHILADELPHIA CONVENTION

The Program Committee of the American Association of Nurserymen have decided that sociability is as essential for the success of the association as papers and discussion on "Blister Rust" "San Jose Scale" and the "Low price of Nursery stock," and in their wisdom they have decreed that a "dinner" shall be given to the members of the association, their wives, daughters and sweethearts. Therefore arrangements for the dinner have been made. It will be held in the Hotel Adelphia, Wednesday evening, and it will be "some dinner."

Anyone can go to the Adelphia and buy a dinner, or to a Child's restaurant and get a "sinker and a hot dog," but no one with intelligent foresight will miss the associa-



PETER YOUNGERS, Geneva, Neb.,
Treasurer of the
American Association of Nurserymen.

tion dinner, or if he does his regrets will be keen and lasting.

The Committee having the matter in charge, are not only providing the dinner, but realize that there must be something "doing" to afford amusement and to aid the digestion of the good things which will be provided. To this end Mr. W. F. Therkildson, advertising manager for W. Atlee Burpee & Company and Mr. Irvin F. Paschall, who holds a similar position with the "Farm Journal," were consulted. They are men wise in providing just the elements to make this dinner one long to be remembered. They are both members of the "Poor Richard Club" of Philadelphia, and with the help of this celebrated club have engaged to see that none will leave the dinner unsatisfied.

There is to be good, wholesome fun, that your wives, daughters or sweethearts will enjoy.

At the last convention a resolution was passed that no

entertainment should be given at the expense of local nurserymen, and it has therefore been decided that the expenses of the dinner shall be borne by those who attend it. The price of the tickets has been set at \$2.00 each. Your wife, daughter or sweetheart will be given a ticket free.

Do not miss this dinner. You will get more for your \$2.00 than you ever did before. The "Baby Ramblers" will see you on the first day of the convention and will be delighted to sell you a ticket.

EVONYMUS EUROPAEUS. This, the Burning Bush as the English call it, is a widely distributed and variable European shrub or small tree. The fact that the leaves usually remain green or nearly green on the branches until after the fruit has colored and opened adds to its beauty. The fruit is about two-thirds the size of that of *E. yedoensis* and deep dull red with lustrous bright orange-colored seeds. There are several forms of this small tree in the collection. One of the handsomest of these has been raised here from seeds sent to the Arboretum from Hungary. On this form the leaves are now dark purple on the upper side and green below. With this are plants of the variety *ovatus* with leaves as fresh and green as they were at midsummer.

EVONYMUS RADICANS VAR. *VEGETUS.* Visitors to the Evonymus Collection should look also at the plants of this broad-leaved evergreen from the forests of Hokkaido. Although it is capable of climbing high up the trunks of trees and the sides of buildings it has been grown in the collection as a broad, low, round-topped shrub. Of all the forms of *E. radicans* it is the hardiest and the best for this climate; none of the others bloom here so freely or produce such abundant crops of fruit. This is white, slightly tinged with yellow and the seeds, which can now be seen, are bright orange color.

PLATANUS ORIENTALIS. This name now appears in many American nursery catalogues, and a tree under this name has been largely planted in recent years in the middle and less commonly in the New England States. This tree, however, is not *Platanus orientalis*, which has leaves deeply divided into long pointed lobes, and is a native of southeastern Europe and of western and southern Asia Minor. Under favorable conditions it grows to an enormous size and attains a great age. Very large specimens can be seen in Greece, in the neighborhood of Constantinople, in Dalmatia, and in other countries of southern Europe. There are a few old trees in Great Britain, some of which are believed to be more than two centuries old. In the Arboretum *Platanus orientalis* is only a small bush, the branches being killed to the ground nearly every winter, and we have no information of the occurrence of any other specimen in the eastern United

States. This noble tree will probably be hardy and grow to a large size in some parts of California. The tree which is grown as *Platanus orientalis* in the eastern United States is *Platanus acerifolia*, which is easily distinguished from the Oriental Plane by the much less divided leaves which in shape are very similar to those of the native Plane tree. It is this tree which has been so generally planted in London that it is often called the London Plane. The origin of this tree is unknown. Some students believe it is a hybrid between the Oriental Plane and the Plane-tree of the eastern United States; others that it is a species from the mountains of Asia Minor, Afghanistan or northern Persia. No tree, however, like *P. acerifolia* is now known to grow wild in any part of that region, and those who support its hybrid origin point out the fact that the leaves resemble those of the American species and that the fruit is usually furnished with the terminal prickle which is found on that of *Platanus orientalis*. Whatever its origin *Platanus acerifolia* is a noble tree, and the Planes in the streets and squares of London, in spite of the difficulties of London conditions for trees, are probably the finest trees to be found in any city. This tree has been cultivated in the United States for more than a century and has proved an excellent tree for street planting in the middle Atlantic states; it is a comparatively new tree to New England where it is generally satisfactory, although it sometimes suffers from severe cold. It is desirable that the name, *Platanus orientalis* should disappear from American nursery catalogues.

THE JAPANESE YEW. As the years pass the hardiness and value of this Yew are confirmed by longer trial. There are three or four quite distinct forms. The one probably most often seen here grows as a large, vase-shaped shrub with several spreading stems. Plants of this sort have been raised in the Arboretum from the seeds of tall forest trees collected by Professor Sargent in Hokkaido. Among these plants there are some which are beginning to develop a single leader and promise to grow into trees. There is another form which is grown in some American nurseries under the unpublished name of variety *capitata*. This is merely a seminal form which begins to grow with a single leader with treelike habit as soon as the seeds germinate. For those who want the Japanese Yew in the form of a tree rather than a bush this form will best produce the desired results. Another bushy form with wide-spreading, nearly horizontal branches, which on plants thirty or forty years old often turn up at the ends and darker green leaves, is often seen in American gardens in which specimens only four or five feet high but sometimes twenty feet in diameter are found. In this country this variety is generally called variety *brevifolia*, but the correct name for it is var. *nana*. A

dwarf, round-topped plant (var. *compacta*) is the smallest and most compact of all the forms of the Japanese Yew in this country. A good plant of this dwarf form can be seen in the Arboretum collection where it has been growing for many years. Plants intermediate between the varieties *compacta* and *nana*, differing in size and habit, are sometimes found in American gardens. What is probably the largest Japanese Yew in the United States is one of the bushy vase-shaped plants which was planted about 1870 by Dr. George R. Hall in his garden in Warren on Bristol Neck, Rhode Island. In October, 1889, this plant was twelve feet high and covered a space on the ground of forty feet round. In October, 1916, twenty-seven years later, it is twenty-two feet tall and covers a space one hundred and thirty-two feet round.

Our attention has been called to the following newspaper clipping and the query asked by the nurseryman who sent it "Is it true that nurserymen are selling their surplus fruit trees at any old price?"

We are afraid it is only too true. We would strongly urge that the subject be taken up at the coming Convention and see if something cannot be done to prevent such demoralizing practices.

OFFER 200,000 FRUIT TREES AT BARGAIN PRICES

Will be Burned if Public Fails to Take Advantage of the Opportunity, Western Farmers cease to Plant Nurseries

DANSVILLE, N. Y.—Two hundred thousand fruit trees at bargain prices are being offered to the public by the Horticultural Nurseries here because, since the pomologists of the West have ceased to plant large orchards these trees must either be sold or burned, and the latter course would mean a great loss to their owners. The land now occupied by these trees will be cleared in about three weeks and made suitable for farm crops.

"It would seem to us as though the press and government should help us out to at least getting part of what these trees cost us," said an official of the nurseries. "We will go into any city in New York State with one, two three or more carloads of these trees, and we will offer them to the people at ten cents each, and they may pick the varieties they want. The people are planting gardens to produce vegetables, which means this year's supply only. If they would plant a few fruit trees it would mean a supply for thirty or forty years to come."

FOREST TREE SEEDLINGS and ORNAMENTAL SHRUBS

We are growing and offering for sale for fall 1917- and Spring 1918, a limited quantity of Forest Tree seedlings such as Box Elder, Red Bud, Maples, Hackberry, American Sweet Chestnuts, 2 year olds, Green Ash, Tulip Poplar, Sycamore, Locusts, Walnuts, Etc.

Shrubs, Altheas in varieties, Berberry, Deutzias, Forsythias, California Privet, 1 and 2 years old, Also Amoor River, Ibota, and Polish Privets, Spireas in varieties, Weigelas, etc., Trade list will be mailed in August.

Write for quotations.

FOREST NURSERY COMPANY
McMinnville, - Tennessee

FOR SALE

OLD ESTABLISHED NURSERY FOR SALE

As I want to retire from business, I will sell besides the land, all nursery stock and implements. This nursery is located in the Northwest in one of the best business localities of this country. Address:

Z. W. S., Care "The National Nurseryman."

Watch the Advertisements in
THE NATIONAL NURSERYMAN
They Bring the Answer
Address HATBORO Office for Rates

THE NORTHEYBERRY

The universal verdict of all who sample this new berry fruit is: "The most delicious berry I ever sampled." Has the market to itself on account of its extreme earliness and exquisite flavor. Fruit large, a deep vermilion red, very showy, great shipper, enormously productive. Not a dew-berry, blackberry or raspberry, but a distinct new berry fruit. Three plants for one dollar to any P. O. in the U. S.

Pleasant Valley, S. L. WATKINS, California.

Seeds For Nurserymen

Now is the time to take up with me,—your 1917 requirements in Mazzard and Mahaleb Cherry and Myrobolan Plum Seeds.—It is not too early.—Play safe and do it now.

THOMAS J. LANE
SEEDSMAN

DRESHER - PENNA.

P. OUWERKERK,

No. 216 Jane St., Weehawken Heights, Hoboken, N. J.

Rhododendrons, Clematis, H. P. Roses, Hardy Azaleas, Paeonies, Magnolias, Box Trees, Fancy Conifers, Hydrangeas and Shrubs, our specialties at our HOLLAND NURSERIES. Some of the goods on hand here during the packing season.

PEACH SEED

We have for sale a quantity of fine, natural, mountain grown peach seed. Our peach seed are collected in the mountain district of Western North Carolina and have given universal satisfaction to nurserymen for a number of years. Write us for prices when in the market. Samples on request.

Morganton MORGANTON GROCERY COMPANY, North Carolina

FOR SALE:- TREE CULTIVATOR

The Pilot Double Worker 2 Horse Cultivator Made in Vincennes, Ind. For working over Nursery stock 4 to 6 ft. high. Full Attachments, Shovels, Disks and Scrapers, Used only one year

H. G. Baugher, Prop. The Adams County Nursery Aspers, Pa.

"Hathaway's" the Most Extensive, Exclusive Berry Plant Nursery in America

The leading varieties supplied in large quantities, including Fall Bearers. Currants, Grapes, Gooseberry, Blackberry, Raspberry and Strawberry. Root Cuttings, Slips, Tips and Transplants a specialty.

You never delivered finer stock nor received quicker service than you get from yours truly.

WICK HATHAWAY, Madison, Ohio.



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Specialists in Nursery Printing

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We are the printers of this Magazine



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Publishing Co.

Hatboro, Pa.

Berberry Thumbergii Seedlings

Get our prices before placing your order.

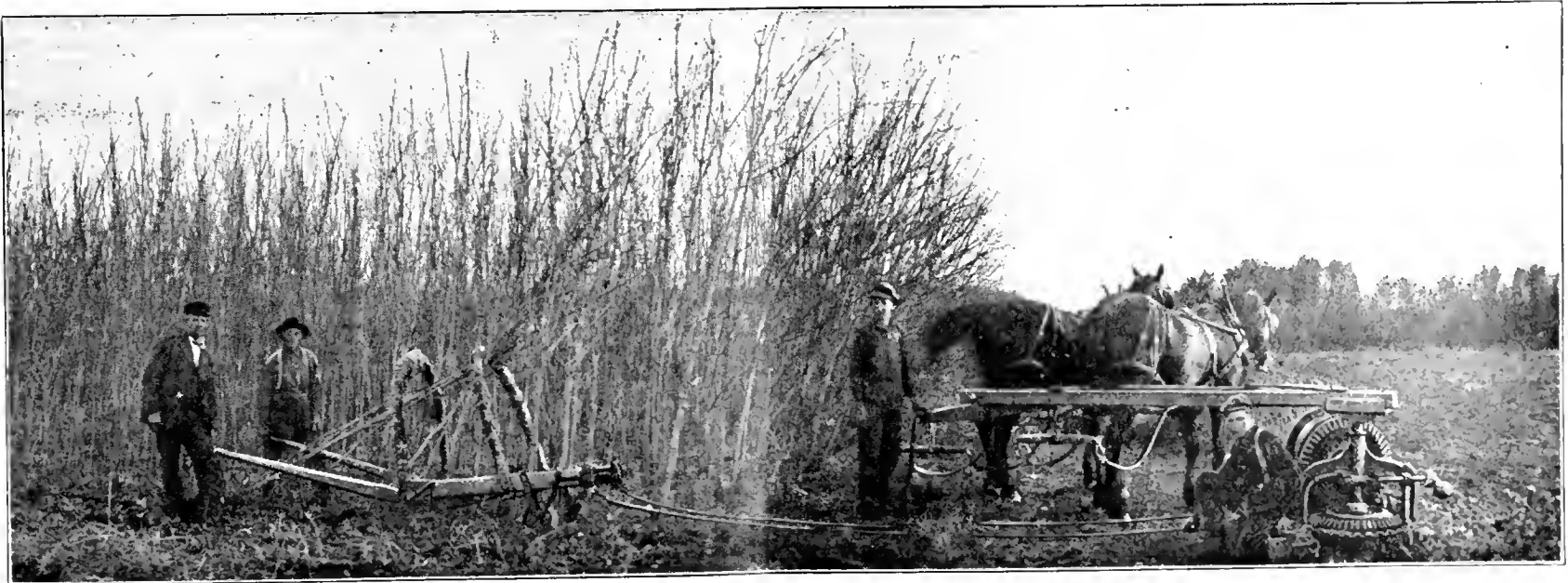


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INCORPORATED 1902

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McFARLAND PUBLICITY SERVICE
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For 102 Years the Home of Stark Bro's Nurseries and Orchards Co.

THIS is a corking good town. It has more good-looking girls, more avenues of shade trees, more happy homes and more really good people than any other town of its size that we have ever seen or ever heard of.

Our pioneer forefathers made a good selection when they picked out this place for a trading post way back there before Missouri became a state. The beautiful hills and the broad, fertile valleys gave promise of a future that even in those pioneering days could not be overlooked—and so, Louisiana, Mo., named in honor of and soon after President Jefferson's great Louisiana Purchase, became a very small dot on a mighty big map.

The Old-Timer's dream of miles and miles of fields of grain has become a reality, and the trading post of over a century ago has been the home of great and good men and women who have helped to make national history.

But one thing happened that was not on the program: A man named Stark, fresh from the war of 1812, rode his big Kentucky thoroughbred into the promised land, and hitched. And it wasn't long until the people of the hamlet began to hear things about growing trees—for he was a man with a mission.

This was our great, great-grandfather, Judge James Stark, and that tree hobby of his made possible "The Town That's Known Wherever Trees Are Grown," all over America. And the ideas and ideals of this man and of those of his family who followed him have made the name Louisiana, Mo., stand for something else besides just trees. It stands for *good* trees, it stands for tree honesty, for square methods, for golden-rule nursery ideas, and the Starks of the present generation are doing their best to live up to the ideals and improve the methods that have made this organization what it is today.

As we said at the beginning, Louisiana, Mo., is a mighty good, live town. Some of you have stopped here, and the members of the Stark Bro's Organization have pleasant memories of these visits, and they hope that you'll come again. To the others we will give a hearty welcome when they come our way. The latch-string always hangs on the outside. We are proud of our good town, and our great big nursery just on the outskirts.

Louisiana is conveniently located up in Northeast Missouri, not far from the Iowa line, on two main-trunk-line railroads. Stop off and see us on you way to or from Philadelphia.





THE NATIONAL NURSERYMAN



JULY 1917

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

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Established 1847.

Offers a Fine Stock of

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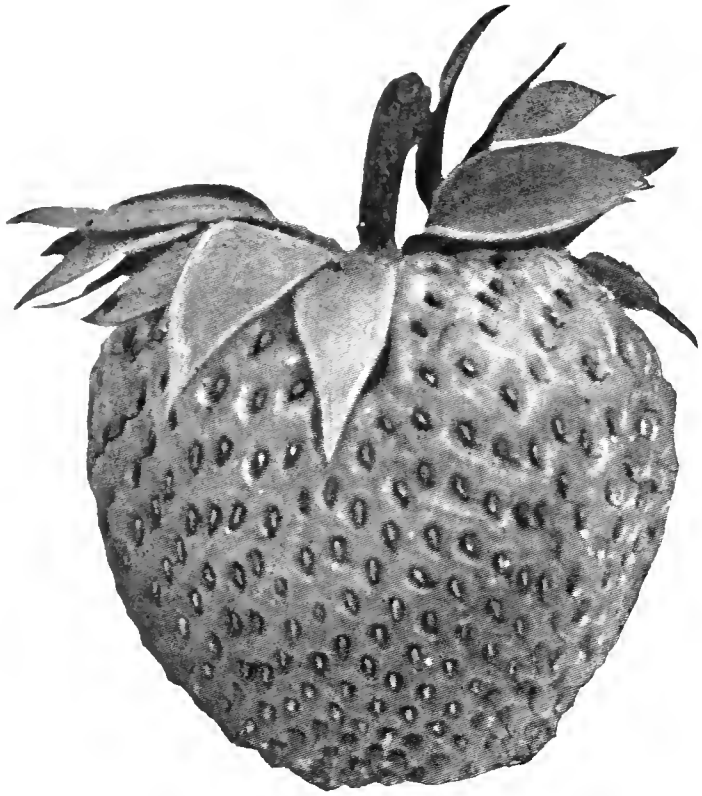
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Our plants are healthy, heavily rooted, and guaranteed *true-to-name*.

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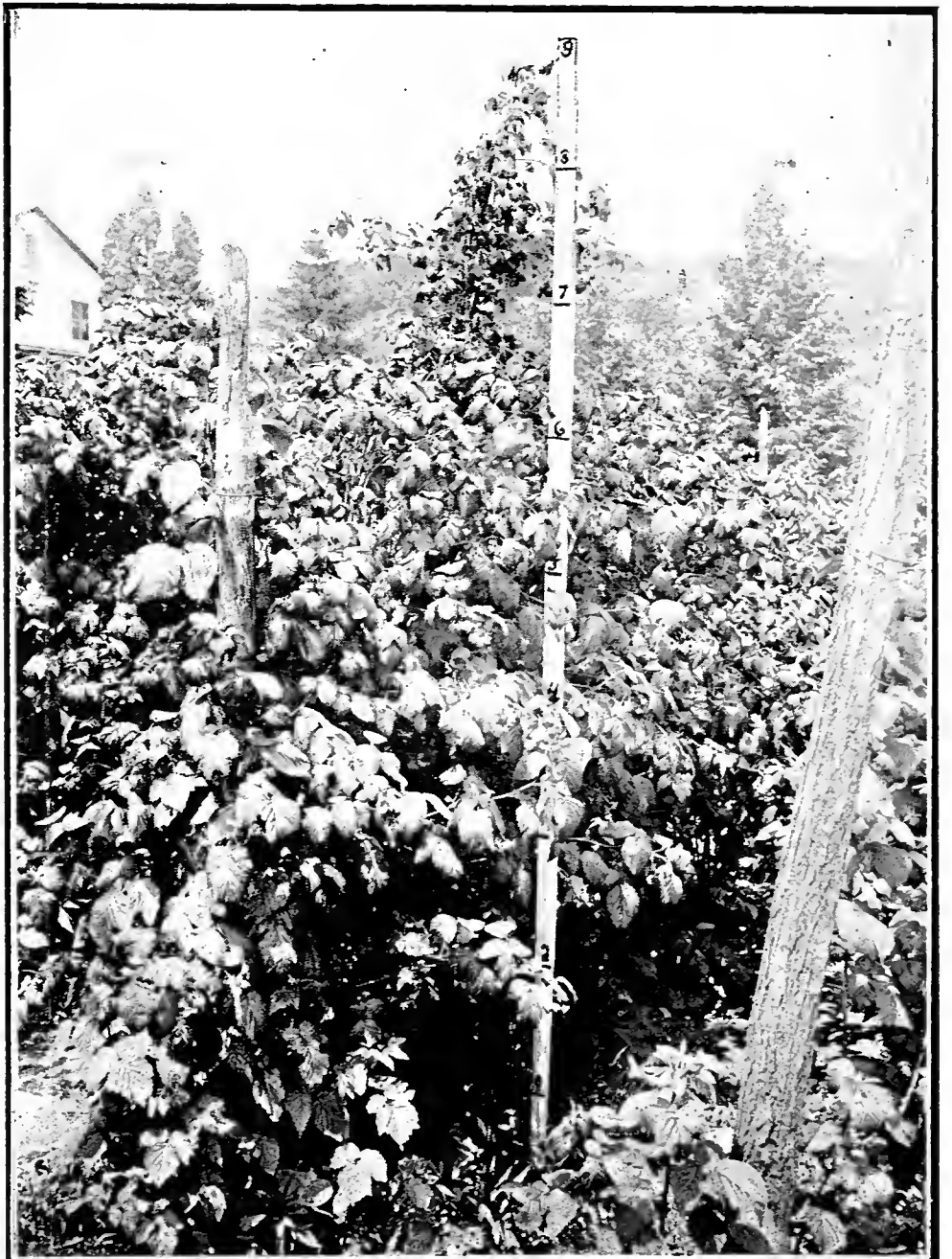
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The Empire Red Raspberry

Report of New York Experiment Station
on New and Worthy Fruits

Empire is one of the most promising new red raspberries on the Station grounds, having hardiness, productiveness, vigor of bush, healthiness and large, handsome, firm, well-flavored fruits as its chief assets. The canes need no winter-protection in this region; equal any other variety in productiveness; are unusually vigorous, reaching a height of six or eight feet; and this season, 1916, when anthracnose was everywhere rampant, showed but a trace of this disease. A peculiarity of the canes is that in mid-summer they are purplish-red but become brown at the close of the season. The berries average larger than those of the well-known Cuthbert, and are about the same color as those of that variety; they ripen a little earlier and have a longer picking season. The fruits are mild, rich and sweet so that the variety may be ranked among the best in quality. The texture is firm and without doubt the berries will stand shipment well and may be kept long. With such an array of good characters, it seems certain that Empire must take high standing among commercial red raspberries.

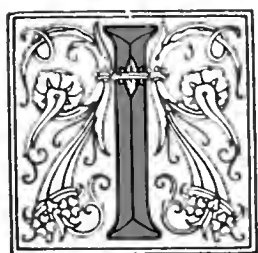
We are anxious to have all interested persons visit our fruiting fields this season and see the "EMPIRE" in all its glory which will be about July 1st, but as its picking season is from four to five weeks you can easily arrange to see it. We are so sure that you will pronounce it the "Best Ever" in raspberries, that we will pay the traveling expenses of anyone who comes to see it and does not find it all we represent.



L. E. Wardell & Son and C. G. Velie & Son
Marlborough, N. Y.

Note height of bush in comparison with the nine foot pole
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TODAY

700
W. A. GARRABRANT
*Horticultural
Publicity*

700 GRAPHIC ARTS BLDG.

KANSAS CITY, MO.

ESTABLISHED 1865
RUMBLE & WENSEL COMPANY
NATCHEZ, MISS.



March 17, 1917

Mr. W. A. Garrabrant,
700 Graphic Arts Bldg.,
Kansas City, Mo.

Dear Mr. Garrabrant:

We are just in receipt of a letter from one of our customers
in Kentucky saying:

"You will please find enclosed \$1.00 balance due you
on four (4) bushels of Lespedeza Seed which I recently
ordered of you, and wish to thank you very much for
your promptness in the matter.

I will certainly know where to order seed in the
future as I like your way of doing business.

I will be glad to receive a price list from you every
fall and spring and thanking you for your courteous
treatment, I remain — "

Of course it makes us feel good to get a letter like this
and thought you would appreciate hearing from us about the
catalog you prepared for us this spring.

We are indeed well pleased with it and have had compliments
on it from practically all over the Southern States. Have
had several requests for permission to reproduce portions
of it. Your service has been invaluable to us.

It is now time we were figuring on our fall book. Let
us have your estimate of the cost.

Yours very truly,
RUMBLE & WENSEL CO.,

By *L. Mitchell*

YOUR
INQUIRY
SOLICITED

PAINESVILLE NURSERIES



Our nursery is headquarters for high-grade field-grown ROSES. Its annual production of Ornamental, Deciduous, and Evergreen Trees and Shrubs, Fruit trees and small Fruits, runs into millions. We are always glad to quote on any stock we grow.

THE STORRS & HARRISON CO.

NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

When writing to Advertisers please mention the National Nurseryman.

J. & P. Preferred Stock.

J. & P. Preferred Stock.


Not How Cheap, But How Good

is our slogan. It is our ambition to grow and sell the best there is in our lines,—because quality goods sell themselves, and at living prices. It isn't necessary to be always cutting under the other fellow.

We grow a pretty complete assortment but our specialties are—

Field-grown Roses
Clematis, Large-flowering
Tree-form Hydrangeas
Shrubs
Paeonias

Ampelopsis Veitchii
Clematis Paniculata
Tree-form Lilacs
Perennial Plants
Shade Trees

 Note: We sell to the trade only. Have no retail business of our own. Our trade customers get and are entitled to our very best stock and very best attention.



Jackson & Perkins Company

NEWARK

NEW YORK

J. & P. Preferred Stock.

J. & P. Preferred Stock.

Heikes—Huntsville—Trees



To Meet Your Needs in
Peach, Apple, Cherry, Pear, Plum, Compass-Cherry-Plum, Apricot, Pecan Seedlings, Privets, Roses (budded and own-root), Abelia Grandiflora, Berberis Thun., Spirea V. H. and Reevesiana, Lonicera Fragrantissima and Halleana, Kudzu Vines, and Sundry Ornamentals.

In good assortment of standard varieties. All our own growing.

Send us your orders and inquiries.

ROSES, Budded H. P's. One of our Specialties.

We grow them by the hundred thousands.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

FIFTIETH YEAR

T. S. HUBBARD GO.

FREDONIA, N. Y.

The longest established and best known growers of

Grape Vines

And the largest stock in the United States



CURRENTS and GOOSEBERRIES

A fine stock of leading varieties. One and two years.

BLACKBERRIES

The largest and best stock of root-cutting plants in this country. All the best varieties. Snyder in great quantity. Our blackberry plants are as well furnished with fibrous roots as our well-known grape vines.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of
Own Root Roses

ORNAMENTAL TREES SHRUBS

BERRIES CLEMATIS

EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY
GENEVA, N. Y.

70 Years

1000 Acres



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE



THE

North-Eastern Forestry Co.

CESHIRE

...Connecticut...

WHEN in doubt, you usually stop at the new hotel, don't you? We stopped at one during the Philadelphia Convention. That's because the new hotel is apt to have and usually does have all the latest improvements; things are fresh and clean and there are no ancient odors; the equipment and service are modern and up-to-date and efficient.

New nurseries should have, and some do have, the same advantages. Take ours for example; the location was selected because of soil and climate; because the materials and conditions offered the best opportunity we could find anywhere for growing what we want to grow, what we are growing; a list of Ornamentals unequalled in variety and quality. The equipment is new; new cellar, new packing-house, new side-track for loading under cover, new office, new stock—young, clean, thrifty and free from pests. The only thing that's old about the joint is the men running it, and they are old only in experience in growing and in serving the Trade faithfully and efficiently; old in knowledge of the business and old in the acquaintance and the friendship of nurserymen everywhere.

Ask any nurseryman who has been here what he thinks of our land and what we are growing on it; ask our customers what they think of our goods and grading and packing.

Wholesale Growers
Ornamentals mostly
For The Trade Exclusively.

Under one flag. There it is!

The Men:
William Flemer
John Watson
Wm. Flemer, Jr.

The New:

Princeton Nurseries

At Princeton, in New Jersey.

J. H. Skinner & Co.

Topeka, - Kansas



Apple Seedlings

Japan and French

Pear Seedlings.

Forest Tree Seedlings

FRUITS TREES

SMALL FRUITS

Rhubarb, Myatt's Linnaeus, divided roots, pure stock; Shade Trees, including a fine lot of Soft Maple and White Elm.

CATALPA BUNGEI

6½ foot stems, straight and smooth

Bechtel's Double Flowering Crab

Ornamental Shrubs

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

**Rawhide Brand of Shipping
Tags and Tree Labels**

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

ORNAMENTAL

TREES, SHRUBS, VINES, EVERGREENS
HARDY HERBACEOUS PLANTS

225 Acres

Entirely devoted to the growing of the
best quality of ornamental nursery stock.

WHOLESALE ONLY

We also grow the "unusual" things, you
cannot find elsewhere.

Small Trees and Shrubs for
Planting in Nursery Rows.

We shall have our usual supply for Spring
delivery. Catalogue ready January first.

RAFFIA HEADQUARTERS

Supply of our usual brands on hand at
all times.

Thomas B. Meehan Co.,
WHOLESALE NURSEYMEN

Dresher, - Penna.

TO LINE OUT

**Fruit Tree Seedlings to Bud
Young Ornamentals to Grow On**

We sell them for Delaunay, Angers, France; we are making his goods and grades and packing known to the Trade. We shipped into 26 States last season. Our list of customers includes the largest growers and most careful buyers in the business: in fact, it's a "Who's Who" among nurserymen. Glad to refer you to customers for information as to how they were pleased.

Price-list is ready; send for a copy.

Last season, every order arrived safely, at unusually low cost and in excellent condition; and every order was filled.

Write us before buying French Stocks; get all your money will buy you in goods and service.

John Watson & Company

NEWARK - NEW YORK

July 1.

For Fall of 1917

*WE will have our usual line
of Ornamentals, Shade
Trees, Perennials, Apple,
Plum, Cherry, Peach, etc.*

C. M. Hobbs & Sons

Marion County

Bridgeport, - - Indiana

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa.

STARK BRO'S

Extra Heavy 2-Year Grape

Leading varieties, especially Concord. Strong tops and big roots, greatly preferred by the Retail Trade. Our heavy Extra No. 1 2-year grades will please your customers and cost no more than the ordinary No. 1 grade usually offered.

The vines we grow in Erie Co., Pa., in the fine grape soil along the South shore of Lake Erie, are unsurpassed.

In addition to Concords, we will have Moore Early, Niagara, Worden, and other standard varieties on which we will be pleased to quote.

Special prices for early buyers—send us your want lists.

Stark Bro's Nurseries LOUISIANA, MO.

Grape Nurseries in Erie Co., Pa. Best Grape Soil in America

The Best In Nursery Products

We carry a full line of fruit and ornamental trees, evergreens, shrubs, etc. Send us a list of your wants.

A FEW SPECIALS

Oriental Planes from 1¼ to 3 inch caliper. A large stock of Sugar Maples, American Elms, Carolina Poplars, Lombardy Poplars, Beech grafted River's, and Fern-Leaved, Double Flowering Japan Cherries, Prunus Pissardi, Flowering Apples, Flowering Peaches, Magnolia Tripetela, Japan and American Judas, Japan Walnuts, American Arbor Vitae, Hemlock and Norway Spruce, Altheas, Forsythias, Philadelphus, Viburnum Plicatum, Weigela, Eva Rathke, etc.

10,000 Downing Gooseberries, 2 years No. 1.

HOOPES BRO. & THOMAS COMPANY

THE WEST CHESTER NURSERIES

Established 1853 West Chester, Pa. Incorporated 1907



BERRY'S Wholesale Nursery

Small fruit plants in variety; rhubarb; horseradish; California Privet; Barberry Thunbergii; Hydrangea P. G.; Spirea Van Houghti; Peonies—home grown and imported; Imported Boxwood, etc.

Stock in storage. Can ship any time.
See list before placing your order.

P. D. BERRY,
Dayton - - - Ohio

We Are Prepared To Supply The Trade

ROSES, Field-grown, own roots and budded.
ABELIA GRANDIFLORA. Transplanted, field-grown.
BERBERIS JAPONICA.
AZALEA INDICA (Home-grown)
GARDENIAS.
ENGLISH LAUREL.
MAGNOLIA GRANDIFLORA.
MAGNOLIA FUSCATA.
OLEA FRAGRANS.
CAMPHOR (pot-grown.)
LIGUSTRUM JAPONICUM, LUCIDUM, NEPALENSE,
and other good varieties, fine bushy plants.
SATSUMA ORANGE. Field-grown, budded on Citrus
Trifoliata.
BIOTA AUREA NANA (Berckmans' Golden Arbor-
vitae)
BIOTA AUREA CONSPICUA.
RETINISPORA. In variety.
JUNIPERUS. In variety.
WISTARIAS. Grafted, best sorts.
APPLES.
JAPANESE PERSIMMONS.
ENGLISH WALNUTS.
MULBERRIES.
SPIRAEA THUNBERGII. A beautiful lot of stocky
plants.

A fine stock of Hackberries, Koelreuteria, Tulip Poplar, Magnolia Purpurea, Texas Umbrella, Sycamore and Elms.

Send us a list of your wants and let us give you quotations.

P. J. BERCKMANS CO., Incorporated
Fruitland Nurseries. Augusta, Georgia

Native Trees, Shrubs and Vines

At Special Prices
WHOLESALE ONLY

Sweet Hollow Nurseries

WEST HILLS, HUNTINGTON
Long Island, - New York

C. Van Kleef & Company

Nurserymen

BOSKOOP, - HOLLAND

Specialties: Kalmias, Andromedas, Ilex opaca, crenata, glabra, Azalea viscosa, nudiflora, calendulacea and arborescens, Cornus florida rubra, Vaccinium corymbosum and macrocarpa, etc., etc.

Representatives:—

John Van Kleef and John A. Driesprong

From 1 February until 1 June

Care Maltus & Ware,
14 STONE STREET - NEW YORK

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Fall 1917

GRAPE VINES—One and two years old. Varieties largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas. Free from weed seeds, all recleaned and guaranteed first class.

Correspondence solicited. Price list upon request.

CHAS. M. PETERS

P. O. Address, Salisbury, Wicomico County, Md., R. F. D. 3
Long Distance Phone and Telegraph, Salisbury, Md.

The Framingham Nurseries

200 Acres
High Grade
Trees, Shrubs,
Evergreens,
Vines, Roses,
Etc.



Fine Stock
of
Rhododendrons
Kalmias
and
Andromedas

Send for Price List

W. B. WHITTIER & CO.

FRAMINGHAM, MASS.

We have a splendid stock of Grape Vines

and other small fruit plants for the Nursery trade, graded up to the highest standard and sure to please you.

Give us a trial order, send in your list now for quotations

WHELOCK & CONGDON

SUCCESSORS TO
WILLETT & WHELOCK

North Collins, - N. Y.

P. OUWERKERK,

No. 216 Jane St., Weehawken Heights, Hoboken, N. J.

Rhododendrons, Clematis, H. P. Roses, Hardy Azaleas, Paeonies, Magnolias, Box Trees, Fancy Conifers, Hydrangeas and Shrubs, our specialties at our HOLLAND NURSERIES. Some of the goods on hand here during the packing season.

Watch the Advertisements in
THE NATIONAL NURSERYMAN

They Bring the Answer
Address HATBORO Office for Rates

When writing to Advertisers please mention the National Nurseryman.

REMEMBER!

If its a hardy perennial or so called old fashion flower worth growing, we have it in one shape and another the year round. We have the largest stock in this country, all Made in America, and our prices—

Why say more here. Send for our Wholesale price list of varieties and benefit from the opportunities this affords you.

Our motto: "Maximum Quality, Minimum Cost."

Address, R. W. Clucas, Mgr.
Palisades Nurseries, Inc. Sparkill, N. Y.

Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

Prepare for Fall by securing the best Cherry to be found. Our blocks of Cherry are the largest in the U. S. and quality the best. While the U Boats have been sending Mahalebs to the bottom the past two years, we have been fortunate in securing our usual supply and will have a splendid lot of trees to offer in the following:

CHERRY TWO YEAR general list of varieties

CHERRY ONE YEAR 11-16 up Sweets and Sours

PEACH ONE YEAR leading varieties

PLUM Japans, European and Hansen Hybrids

COMPASS Cherry and Apricots

APPLE leading varieties in connection with other stock only
Grafted English Walnuts and Northern Pecans

Special prices to car lot buyers on large orders

You can save Time and Money

If you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

Sarachan & Rosenthal

64-66 Hanover Street

Rochester, - - New York

WE OFFER

Grape Vines, Currants and Gooseberries

in all varieties and grades

—also—

Grape and Currant Cuttings and Light

Grade of Vines for Lining Out

in Nursery Rows

WRITE FOR PRICES

F. E. SCHIFFERLI, Fredonia, N. Y.

We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER - - MARYLAND

We offer for Fall 1917

250,000 PEACH, 40 Varieties, 1 year buds

CALIFORNIA PRIVET, 1 year and 2 year

ASPARAGUS, 1 and 2 year

DOWNING GOOSEBERRY PLANTS, 2 year

BARBERRY THUNBERGI, 2 and 3 year transplanted

Can supply the above stock in car load lots or less, also, have a large stock of Rhubarb, Cumberland Raspberry Plants, Spireas, Deutzia Assorted, nice specimen plants. Evergreens, Horse Chestnut, N. Maple, Lombardy Poplar and Planes, etc.

We will make attractive low prices for early orders
Send List of Wants

For FUMIGATION With
HYDROCYANIC ACID GAS
"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.
100 WILLIAM ST. - NEW YORK, N. Y.

WOOD LABELS

For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

Dayton Fruit Tree Label Co.
South Canal St., Dayton, Ohio

Hill's Evergreens

You can work up a good profitable trade in Evergreens if you have the right kind of stock. Our main specialty for over half a century has been the propagation of young Evergreen stock for the wholesale trade in immense quantities at low prices.

We have all the leading varieties in small sizes, for all purposes, suitable for lining out to grow on for your trade.

Nurserymen who have heretofore depended on Europe for their young Evergreen plants can now be assured of a good reliable source of supply right here in America, and we solicit the opportunity of quoting on your requirements.

"Made in U. S. A." and "American Stock for American Planters" should, from now on, more than ever, be the slogan of American Nurserymen for it means "money saved in the long run" to start with nice, strong, sturdy, vigorous American-grown stock which has been produced right here in America.

YOU want to keep posted on Evergreens;

WE want to become better acquainted with you;

Let's get together.



The D. HILL Nursery Co., Inc.

Evergreen Specialists

LARGEST GROWERS IN AMERICA

Box 401

Dundee, Ill.

Peonies and Iris

Catalogue Now Ready

...OUR GUARANTEE...

We will replace with three all plants not proving true to description.



Peterson Nursery

30 N. La Salle Street

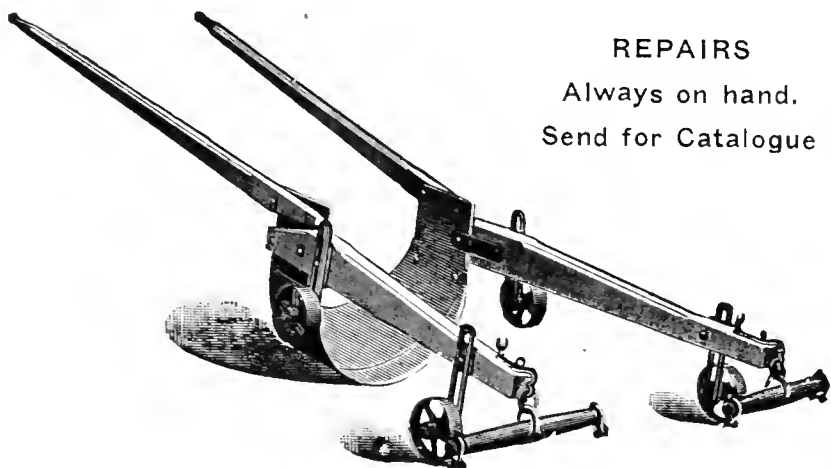
Chicago,

Illinois

1887

1917

BRAGG'S COMMON SENSE TREE DIGGER



REPAIRS
Always on hand.
Send for Catalogue

Digger gets All the Roots at the rate of Twenty to Forty Thousand trees per day, and only needs same power as plow.

L. G. BRAGG & CO.

KALAMAZOO, MICH.

FRENCH FRUIT STOCKS

Offered for Account of

VINCENT LEBRETONS NURSERIES

Angers, France

December or February shipment from France

Mahalebs, Myrobolans, Mazzards, Apple, Pear, Quince, Manetti and Multiflora Stocks, etc. Also a full line of Ornamentals in lining-out sizes.

Advance prices now ready for Nurserymen.

RAFFIA

RED STAR BRAND, XX Superior, A. A. West Coast, also dyed in various colors. Stock always on hand.

RAFFIA MATS

better than burlap.

HARDY JAP. LILY BULBS

Such as Liliun AURATUM, RUBRUM, ALBUM, MAGNIFICUM, Melpomene, Roseum. Import prices. Case lots.

Fall or Spring Shipment

Write for prices

McHUTCHISON & CO. THE IMPORT HOUSE

95 CHAMBERS ST.,

NEW YORK

When writing to Advertisers please mention the National Nurseryman.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXV.

HATBORO, PENNA., JULY, 1917

No. 7

Choosing Plants to Fit the Situation

IN choosing the plants for the different features or parts of the home grounds, it is always well to be governed by the purpose and position, and select plants accordingly. If they are natural features, plants of a formal or exotic nature will hardly be in harmony, for instance a row of *Catalpa Bungei* planted along a natural stream would not be so fitting as *Salix Babylonica* but for lining a drive the former would be most

natural but the only perfectly natural is to let the brambles and other natural growth have its own way. The aim of the nurseryman should be to encourage the use of the choicest and best plants and study the positions where they will develop to their full beauty and be in harmony with their surroundings.

A good illustration of how much better one tree blends with the lines of a house may be seen by comparing the



A simple and dignified treatment of an entrance.

in harmony, the formal lines of the *Catalpa* would blend with the artificiality of the drive.

Buildings, drives, pergolas, terraces, piers, etc., are all artificial and we may as well recognize the fact. Wherever there are geometric lines that cannot be hidden, they should be embellished, beautified and clothed, not necessarily with formal growing plants, but the selection should be made to harmonize. There may be no absolute rule governing this and the differences are so subtle it is difficult to define even a general one.

Landscape gardening seems to run in fashions and fads. Some people seem to strive after the perfectly

Salisburia adiantifolia and say one of the maples. Very few people but what would decide in favor of the *Salisburia*.

The accompanying picture shows a pair of silver-leaved Lindens planted at an entrance.

The semi-formal outline of the trees harmonizes splendidly with the lines of the drives, piers and hedge, and as they are a little different to the trees indigenous to the surrounding country add distinction to the entrance.

There are no discordant notes, it is simple and dignified and much more effective than an obvious effort in planting to produce something more elaborate.

The Forty Second Annual Convention of the American Association of Nurserymen

The Convention opened on June 27th. at the Hotel Adelphia, Philadelphia.

The weather was of the usual convention kind, rather warm, regardless of the geographical location in which the convention may be held.

Visitors began to arrive early in goodly numbers so that by the time the President called the first session to order over 150 had registered.

The arrangement of rooms at the Hotel Adelphia was ideal. Secretary's Desk, Convention Room, Exhibits, etc., all being connected on the one floor.

The Hon. J. Edward Cattell welcomed the nurserymen on behalf of the Mayor, and Mr. Powell Evans on behalf of the Chamber of Commerce, the latter doing all in its power to interest the visitors.

The Mayor is to be congratulated on his selection of spokesman. Mr. Cattell opened his remarks by referring to the Tree of Liberty planted in Philadelphia, from whence cuttings were now being sent to the old country.

After a graceful tribute to the ladies he spoke of efficiency, courage and hard knocks and described the pessimist as a blind man, in a dark room, looking for a black hat that was there. He illustrated each point so aptly with a humorous story that he really started the convention off in a good humor, which clung to it all through the meetings.

Mr. Cattell congratulated the nurserymen on their profession, and termed worthy ones as commercial leaders and moral teachers. Urged elimination of jealousies, and to cling to worthy ideals.

Mr. Lloyd C. Stark, Vice President, in responding to

the hearty welcome of Mr. Cattell and Mr. Evans said, the nurserymen fully appreciated the privilege of coming to Philadelphia at this time because here the seed of the trees of liberty was first planted, and now the greatest war of all time is being fought which really is the culmination of the struggle against tyranny.

Mr. Stark spoke of the nurseryman's part in gathering together the resources of the country, and read the following letter from Prince

Poniatowski pleading for donations of fruit trees to replant the orchards wantonly destroyed by the Germans. Part of his letter follows:

"My idea is to ask American nurserymen to make a gift of so many hundred or thousands of trees that would grow in our district. I would take full charge of them and pay all expenses from New York to the point of landing. My share of the burden will be quite a serious one, as I will have to use special men at this end for the distributing and planting of them in regions which are nearly all under intermittent shelling. But I have very much at heart to replace these orchards, or as many of them as we can, next fall, and to do so I must investigate matters during June. I will start my collection during July so as to secure proper transportation and distribution at this

Some of the big orchard owners would certainly grasp the idea, and their love of trees would certainly induce them to contribute to such an undertaking. They could come later in France and find entire orchards saved through their contributions, trees bearing their names, and, if my attempt is carefully conducted, the region that has been devastated by these barbarians shall become a first-class fruit country in the future; in fact, much better

than in the past. I have no idea of the number of trees that could be thus obtained.

I will send certain analyses of soil which I am now having made, and also the exact atmospheric condition, but, as I say, our country is cool in summer, with fairly damp springs and falls, and a short spell of cold weather (some ten degrees centigrade below zero during the winter and sometimes in the very early spring)."



LLOYD C. STARK, Louisiana, Miss.
President,
American Association of Nurserymen.

PRESIDENT'S ADDRESS

President John Watson made a very full and comprehensive report. So that its many valuable recommendations should not be lost to the association, a committee was appointed to pass upon them. Due to its length we cannot print it in full, but herewith give extracts sufficient to indicate to the members, not present at the Convention, and those of our readers who are not members an idea of the scope of the work being undertaken by the American National Association of Nurserymen.

ADVISORY BOARD.

Acting upon the instructions contained in your resolution creating the Advisory Board, I wrote to the President or the Secretary of all the nursery trade associations asking that each designate a member of the Board; twenty-one state and district associations responded favorably, expressing approval of your idea, and all the members of the Advisory Board have been invited to attend this convention. The drawing together and unifying the various trade organizations and making the National body a sort of clearing-house where the business of the whole trade can be considered, cannot fail to profit all the interests represented. ***

EXECUTIVE COMMITTEE.

***I recommend that the Executive Committee of seven members be continued and selected as at present, but that they be made a Board of Directors and that from their number they select three directors who shall constitute an Executive Committee with power to act, for occasions will and do arise when on account of lack of time or something else, it is impossible to secure an expression from all the widely scattered members of the Executive Committee.

DUES.

I recommend that the dues be made payable January first of each year. ***

MEMBERSHIP.

I recommend that upon the first day of February of each year, a ballot be furnished to every active member of the Association, printed with a list of all the members to be voted on and returned to the Secretary and that those who receive less than 25 adverse votes shall constitute the membership until the next election; and that all those who receive 25 or more adverse votes to be considered as having been dropped from the list of members.

DIRECTORY.

In my letter to you of March first, I called your attention to the difficulties experienced by Secretary Smith and by the committee in some of the states in getting the requisite matter together for its seasonable publication in such form as would be of value. It will not be necessary for me to review now what I reported at that time. In my letter, I asked for your instructions in the matter of having the Secretary proceed with the printing which meant an outlay of a good many hundreds of dollars. Judging by the number of replies received, less than ten per cent. of our members felt an interest in the subject and all but some half dozen of those voted to hold the matter in abeyance until this meeting.

BULLETIN.

I have heretofore called the attention of the members to their failure to use the opportunity offered them for

expressing their views on trade matters in our Official Bulletin. During the past year the Bulletin has been a very valuable news-letter covering many legal decisions and giving our members a great deal of valuable information about transportation, inspection, quarantine, collection and other matters; but it is to be regretted that while this matter has been carefully prepared and excellently presented by Mr. Smith, yet it could have been made much more interesting with the assistance and co-operation of our members. ***

MEETING PLACE.

The advertising possibilities in our trades exhibit have never been quite realized or used to advantage by the nurserymen. This year we have a larger and better display than usual thanks to a very active committee of wide-awake young men, but as a matter of fact, our Associate members have always had more space in the exhibit and have gotten more value from it than the nurserymen have; and I think that is largely because of the difference in the classes of goods that may be shown. The nurserymen's stock is not dormant in June and the stock kept so late in storage from the June Convention is hardly attractive then and represents a crop that is gone and is not a sample of what can be supplied later; and I wonder if it would not be a good idea for the Association to consider deciding upon some permanent place of meeting or for say a period of five years in some centrally located city, and then, closeby, to lease a plat of ground where permanent exhibits could be planted and where new or rare varieties could be shown in growth. That idea might be extended to the point of making such a plantation a sort of test-garden for untried varieties and in that way, under the auspices of the Association, the merits of new things could be ascertained before propagating them extensively for sale, and thus avoiding occasional disappointment. The idea of meeting in different places has been, very properly, to keep the Association from becoming localized and not to have the attendance drawn too largely from any one state or from any particular section. In every convention in former years, there has been a large attendance of local nurserymen who have been absent from later meetings. With a permanent membership, it would seem well to select a central meeting place and to extend the exhibits section by means of permanent plantings.

ARBORETUM.

It is a peculiar fact that we have in this country no National Arboretum. We should have one; the American Association of Nurserymen should initiate and stand sponsor for a movement to secure it. I feel sure that every nurseryman in the Association would be glad to have his stock drawn upon for such an undertaking; that

we could raise a sufficient fund among our members to buy a suitable location and to endow and maintain it; and the distinguished Secretary of Agriculture—by the way, the ablest Secretary of Agriculture we have ever had—might be interested to the point of co-operating with us in the establishing of an Arboretum under the auspices of the National Government at Washington. I recommend that the Association pass a suitable resolution and appoint a committee to secure the establishment of a National Arboretum.

REPORT OF PROCEEDINGS.

In the interest of economy and to save a bill for printing and stenography which seems unnecessary, I recommend that in the future the official record of the proceedings consist only of minutes of the sessions and copies of the resolutions adopted. Printing a stenographic report of all our discussions is so expensive as to raise the question of its value; and it would seem an equally unnecessary expense to print in book form the various papers read in our Conventions when they appear almost invariably in the trade papers before our official report is distributed. We could save approximately five hundred dollars in this way.

STATISTICS.

I ask your careful consideration of the advantage if not the absolute necessity of collecting for the benefit of our members the most complete and accurate information that can be had upon the supply of stock in the country; not only that ready for market, but supplies coming on for later marketing. ***

UNIFORM TRADE TERMS.

The matter of adopting the Uniform Trade Terms recommended by your Executive Committee was not acted upon in your last Convention. Those trade terms have been adopted by the Western Association for Nurserymen, and it would be interesting to know just how far their action goes towards establishing the custom of the trade where terms of payment are not specifically agreed upon? In any event, it has established a precedent. Under the circumstances, it would seem appropriate and even wise and necessary for the American Association, if not approving the uniform trade terms previously proposed, to adopt some other terms more satisfactory, or to say in an authoritative way just what is the custom of the trade in the matter of settlements. ***

TARIFF.

The expense of the war made it necessary for the Government to secure greatly increased revenue and from all possible sources; and the War Revenue Bill introduced in the House provided for a ten per cent ad valorem import tax in addition to all existing duties. I immediately called to the attention of your Tariff Committee the fact that this would make all our present specific duties ad valorem with the uncertainty and embarrassment that comes from the payment of duties on that basis; and to present the objections of the nurserymen the Chairman of your Tariff Committee, Mr. Rouse, went to Washington where with representatives of the Florists and the Seedsmen he made it clear that our objection was not to the payment of our share of a necessary tax, but solely to its change from specific to ad valorem basis. ***

LANDSCAPE.

***I am glad to report that several meetings have been

held and that a joint-committee representing the New York Chapter of the American Association of Landscape Architects, the American Association of Nurserymen and the Wholesale Ornamental Growers Association has been organized with Mr. Vitale as Chairman; and I congratulate all these organizations upon the progress already made toward that good understanding which is the only thing necessary to eliminate whatever differences may have existed between the nurserymen and the landscape architects in the past.

NOMENCLATURE.

The Committee on Nomenclature were continued by vote of the last Convention and they have made a preliminary report which you have received in pamphlet form. ***

We are indebted to the J. Horace McFarland Company, Harrisburg, Penna., for the printed copies of the report furnished without charge, a thoughtful and generous courtesy which, however, does not exceed the measure of our appreciation. ***

LEGISLATION.

In the matter of new legislation, there is at least one subject which has caused us no serious anxiety and that is the tax on excess profits. Most of the legislation and proposed legislation closely touching us has been of course to regulate the inspection and shipment of nursery stock. *** Nurserymen appreciate the value of inspection; it is their bread and butter; it is necessary to their success; the permanency of their business depends upon their ability to deliver clean and healthy trees and plants to their customers in all parts of the country. ***

STANDARDIZATION.

There are several committees appointed this year for the first time because the subjects assigned them have seemed to be such as should have attention under present conditions. *** In our line of business in which the trade's buying is conducted almost entirely upon the basis of price, and where want-lists are very generally auctioned off to the lowest bidder, any movement looking to a standardization of grade and size and quality and service would seem to be timely and profitable. ***

PUBLICATION.

***In your last convention, in Milwaukee, you adopted the following resolution:

“RESOLVED, That the American Association of Nurserymen regard with disapproval the shipment of the Holland nurserymen or others, of stock to be sold at auction and in other ways than by those in trade, to the detriment of legitimate nursery interests, and that the officials and members of this Association are urged to discourage these practices in all proper ways. Also that copies of this resolution be mailed to the foreign nurserymen with request that the resolution be brought to the attention of their trade associations, and, further, that copies be furnished to the trade papers.”

I am pleased to be able to report to you that a great number of the nurserymen of Holland, recognizing the propriety of that action and in an evident wish to co-operate with you in the elimination of injurious practices, have bound themselves by a written agreement with pen-

alties attached to act in accordance with the letter and the spirit of your resolution.

PUBLICITY AND DISTRIBUTION

You have upon your program the two closely related subjects of Publicity and Distribution. Together, they represent our greatest problem. If we study our programs and our discussions in the conventions that we have held in the past forty years, we shall find that we have given our thought very largely to the production of stock to the matter of varieties and their adaptability, to questions of propagation and cultivation; to digging and packing. We have concerned ourselves with the production of trees and plants and always more and more trees and plants to the almost total exclusion of the problem of their distribution; and in that we have attempted to reverse the law that makes the supply follow the demand; we must make the demand and the supply will take care of itself. ***

CONSTITUTION AND BYLAWS. ***

ACKNOWLEDGMENTS.

I wish to take advantage of this opportunity to acknowledge my personal indebtedness to the National Nurseryman and the American Nurseryman, our two trade papers, for many courtesies extended me. Both papers have given liberal space to the affairs of the Association and both have offered to increase the number of their pages whenever necessary to accommodate matter offered for publication in the interest of the Association. I wish to urge upon the Association the importance of supporting our trade papers; while they are private enterprises it is true, and conducted for personal profit, yet a trade is estimated by the unofficial press speaking for it; not only should our members use their advertising columns, but the Association might properly spend \$500 a year on the trade papers which are now furnishing the Association's advertising free of cost. ***

The Convention Dinner

At the 1916 convention a resolution was passed to discourage local nurserymen from entertaining their visiting brothers when attending convention.

This did not prevent the Philadelphia nurserymen from entertaining the ladies, which took the form of a dinner, which proved to be a get-together and a very successful affair.

THE MENU

- 7.08—Mess Call.
- 7.10—Music.
- 7.28—Invocation.
- 7.35—Grapefruit Maraschino.
Hearts of Celery, Radishes, Olives, Nuts.
- 7.45—"Brighten the Corner."
- 7.55—Strained Gumbo en Tasse.
- 8.05—Drill by Marines.
- 8.15—Sea Bass Saute Meuniere.
Pommes Noisette.
- 8.20—Singing of Old-time Songs.
- 8.25—Serbet au Kirsh.
- 8.30—"Burpee's Seeds Grow."
- 8.35—Chicken Casserole Mascotte.
New Peas au Buerre.
Potatoes Pent Neuf.
- 8.45—Latest Messages from Home.
- 8.55—Lettuce and Tomato Salad, Russian Dressing.
- 9.05—Scotch Bag Pipes and Dancing.
- 9.15—Ice Cream Phantasie.
Assorted Cakes.
Demi Tasse.
- 9.25—Hawaiian Dance.
- 9.35—The Toastmaster's Remarks.
- 9.40—The Big Speech.
- 9.55—Singing.
- 10.05—Greetings from A. A. N. Members, with interruptions and Novelties.

10.35—"Star Spangled Banner," led by Columbia and Uncle Sam.

John Hall, former Secretary of the Association was the guest of honor and received birthday congratulations. A pleasing incident was the presentation of a bouquet of roses to Mr. and Mrs. Thomas B. Meehan, it being their 29th wedding anniversary.

Robert Pyle made an able toastmaster, and the entertainment was arranged by the Poor Richard Club.

The inimitable "Bob" Chase sang:

*"I'm a little prairie flower, growing wilder every hour
No one seems to cultivate me, I'm wild, I'm wild."*

"Burpee's seeds grow" proved a very pleasing conceit. Four little girls appeared on the stage with their gardening tools and sowed the sweet peas, which immediate be-



gan to grow up a trellis from which they picked huge bunches and presented them to the lady guests.

"Latest messages from home" were very amusing telegrams.

A traffic cop with a stop sign and a klaxon stationed in the center of the hall controlled the speakers.

Lloyd C. Stark spoke on the "American soldier." William Pitkin, although sadly interrupted on "The difficulties of travel around Philadelphia."

A speech that was entirely prevented by the traffic cop and Stop sign ran somewhat as follows:—Marble tops on furniture is not always a sign of quality. In studying the top of our president I could not help wondering

Wats-on his mind. To him I would say fear not, *Nye* unto him is counsellor and friend.

To the Association I would say:—During the coming year light will be turned on the secret sessions, its *Stark!* who will be our next president.

The old members have been in office long enough, let *Youngers* have a chance.

Mee-han you may be all right, but *Reed* the signs of the times. Let there be no *Welching*.

Let us co-operate and to those who won't, tell them to *Chase* themselves, and if they won't do that, *Wy-man!* *Rouse* mit em.

The real need of the Association is *Cash-man! Cashman*. At every succeeding convention *May-hew* all have a *Dayt-on* similar to the one here to-night.

WOMEN OF THE AMERICAN ASSOCIATION OF NURSERYMEN

The value of the W. A. A. of N. organized last year was fully demonstrated at the Philadelphia Convention.

The men had more opportunity to attend to their business without feeling they were neglecting their wives. As one member expressed it, "we did not see our husbands all day, yet we enjoyed every minute, we got acquainted and saw things."

About fifty visiting members enjoyed the following program.

Tuesday evening, June 26th, 8 p. m.—Women's reception, Ivory Room, Adelphia. Hostesses: Mrs. E. S. Welch, Mrs. W. C. Reed, Mrs. E. R. Taylor, Mrs. F. W. Watson, Mrs. E. E. May, Mrs. John Watson.

Wednesday, June 27th, 8.30 a. m.—Business session, Ivory room, Adelphia; 1.30 p. m. visit to the Curtis Building; 7.08 p. m., dinner of the American Association of Nurserymen, Adelphia Hotel.

Thursday, June 28th, 9.45 a. m., visit to the John Wanamaker store; 1.30 p. m. visit to Old Congress Hall and Carpenter Hall.

Thursday evening, June 28th, trolley trip to Willow Grove Park, as guests of The National Nurseryman. Hosts Mr. Ernest Hemming, Editor; Mr. Penrose Robinson, Assistant Manager.

Friday, June 29th, 8.30 a. m.—Business session, Ivory room, Adelphia; 10.30 a. m. visit to Independence Hall; 1.30 p. m. visit to grave of Benjamin Franklin, the Flag House and Old Christ Church.

ENTERTAINMENT COMMITTEE

Mrs. Thomas B. Meehan, Mt. Airy, Penna.
Mrs. C. A. Bennett, Robbinsville, N. J.
Mrs. F. E. Rowe, Harrisburgh, Penna.
Mrs. J. H. McFarland, Harrisburg, Penna.
Mrs. Henry C. Moon, Morrisville, Penna.
Mrs. Adolf Mueller, Norristown, Penna.

RECEPTION COMMITTEE

Mrs. Allen L. Wood, Rochester, New York.
Mrs. W. N. Searff, New Carlisle, Ohio.
Mrs. J. McHutchison, Jersey City, N. J.
Mrs. George H. Whiting, Yankton, S. D.

Mrs. W. A. Harrison, York, Nebraska.

Mrs. B. J. Vandevort, Normal, Ill.

The following officers were elected for the ensuing year:

Mrs. E. S. Welch, Shenandoah, Iowa, Pres.

Mrs. W. C. Reed, Vincennes, Ind., Vice Pres.

Mrs. E. R. Taylor, Topeka, Kansas, Secretary.

Mrs. F. W. Watson, Topeka, Kansas, Corresponding Secretary.

Mrs. E. E. May, Shenandoah, Iowa, Treas.

EXHIBITS AT THE PHILADELPHIA CONVENTION

Rochester Lithographing Co., Rochester, N. Y.—Tinted Photographs, Plates, etc.

National Nurseryman, Hatboro, Pa.—Trade Publication.

Thomas B. Meehan & Co., Dresher, Pa.—Handy Caliper, Hydrangea, P. G. 2 yr. Cuttings, Red Star and Superior Brand of Raffia.

A. B. Morse Co., St. Joseph, Michigan—Display of Catalogs.

Cooper and Rogers Nurseries, Winfield, Kansas—Mahaleb Seedlings, 1917.

J. Van Lindley Nursery Co., Greensboro, N. C.—Peach Pits.

Clinton Falls Nursery Co., Owatonna, Minnesota.—Cashman Labor Saving Machines, Model of Planter and Firmer.

Angier Mills, Ashland, Mass.—Wrapping and Case Lining Papers in actual use.

Harrisons' Nurseries, Berlin, Md.—Fine sample of Evergreens and Fruit Trees.

Lester Lovett, Milford, Del.—Privet.

American Nurseryman, Rochester, N. Y.—Trade Publication.

The Benton Review Shop, Fowler, Ind.—Sample Catalogs.

Christy Color-Printing-Engraving, Inc., Rochester, N. Y.—Plates and Color Work.

J. Horace McFarland Co., Harrisburg, Pa.—Cuts and Publications.

Successful Farming, Des Moines, Iowa—Publications, Office Specialty Co., Bourse Bldg., Philadelphia, Pa.—Multigraph.

Princeton Nurseries, Princeton, N. J.—Samples of Graded Deciduous Ornamentals.

The Kil-tone Co., Newark, N. J.—Insecticides.

Old Dominion Nurseries, Richmond, Va.—Evergreen and Fruit Trees.

The Rex Company, Rochester, N. Y.—Spraying Materials.

M. Greenbaum, 208 E. 126th Street, New York.—Plant tubs.

Professor J. G. Sanders, State Entomologist, Harrisburg, Pa., exhibited photographs of the New Imported Poplar Canker *Dothieiza populea* that threatens as serious damage to the Poplar trees as the Chestnut Blight, has done the Chestnut trees.

He also exhibited photographs and samples of the White Pine Blister Rust and the Chestnut Blight.

THE BABY RAMBLERS

This young organization proved itself very useful during the convention. Regular Boy Scouts of the Association. They sold the dinner tickets, acted as bell hops, helped the officers, in fact, made themselves generally useful.

The organization is growing, as two pairs of twins were added to their number. They are proving themselves true sons of their dads, as they worked the parent Association for \$25.00 worth of free advertising by putting a sticker on the Badge Book, boosting themselves.

While their caretakers were not looking they wandered off on Thursday evening and found their way to Fair-



mount Inn, where they held their annual feed without the supervision of their nurses.

A very elaborate menu was provided by the caterer, consisting of pap, Mellin's Food, Eskay's Food, candy cigars, sour balls, lemonade, and lots of pie and cake.

It is lucky their nurses arrived in time to prevent excessive eating and see them back safely to Convention headquarters.

The following is a list of the cute and enterprising little fellows:—

Masters Fortmiller,
Bowden,
The Harrison Twins,
Monahan,
Bryant,
Meehan,
Breck,
Essick,
and Frazier.

Albert F. Meehan was elected President because he wanted to be, and

Horton Bowden, secretary because he had a new fountain pen. His address is care of Rice Bros. Co., Geneva, New York.

The McKay Nursery Company has moved their Main Offices from Pardeeville, Wis. to Madison, Wis. Increased business made a more central location necessary. The Company will continue to operate their Nurseries at Waterloo, Wis., twenty-four miles east of Madison, where they grow a general line of hardy varieties of Fruit, Shade and Ornamental stock.

WOMEN OF THE NATIONAL ASSOCIATION OF NURSERYMEN ARE GUESTS OF THE "NATIONAL NURSERYMAN"

About seventy of the visiting ladies accepted the invitation of the National Nurseryman to take a trolley trip to the famous Willow Grove Park. Special cars were chartered.

After rather a warm day in the city, the ride proved a most delightful one, as it is along the Old York Road, one of Philadelphia's most beautiful residential suburbs.

Seats were reserved for the party in the Music Pavillion and all thoroughly enjoyed hearing the Strawbridge & Clothier chorus of 200 voices, assisted by Victor Herbert's Orchestra. The concert proved to be one of the best of the season.

Herbert's Dramatic Cantata "The Captive," considered by the composer as one of his best efforts.

NURSERYMEN'S PUBLICITY

In his address "Nurserymen's Publicity" made at the Philadelphia Convention, J. Horace McFarland made a strong plea for comprehensive publicity campaign and pointed out that now, in spite of the war was the psychological time.

The points he emphasized were that 94 per cent. of the American people were not in the war but would have to change their way of living to support the other 6 per cent. who were actually engaged in war or taken from their customary pursuits. This would entail more business. It was merely hysteria that suggested curtailment and was very much like closing the shop, standing on the corner and talking war.

The nation needs supporting in every possible way in times of stress.

He pointed out that even under the worst possible results of the war, namely the invasion of the country by the Germans it would be much better to have the money invested in the land so they could not take it.

That a nation at war needed to be told how important growing things were, not only as food, but even ornamental things to keep the fighters fit for their strenuous work.

It was necessary for the President to play golf and for the same reason shrubs and plants were shipped to men at the front to give relaxation to the strain and keep men sane.

Now is the time for nurserymen to get busy and sell, the country and the people need their goods and there is ten billion dollars diverted from its usual channels. The cost of the publicity needed to distribute the goods, need not be considered, the customer pays it. Whereas the cost of not selling falls on the nurseryman in the shape of brush piles.

As an illustration Mr. McFarland called attention to the Liberty Loan, and the Red Cross campaign. Both most worthy, yet neither would have succeeded without a Publicity Campaign.

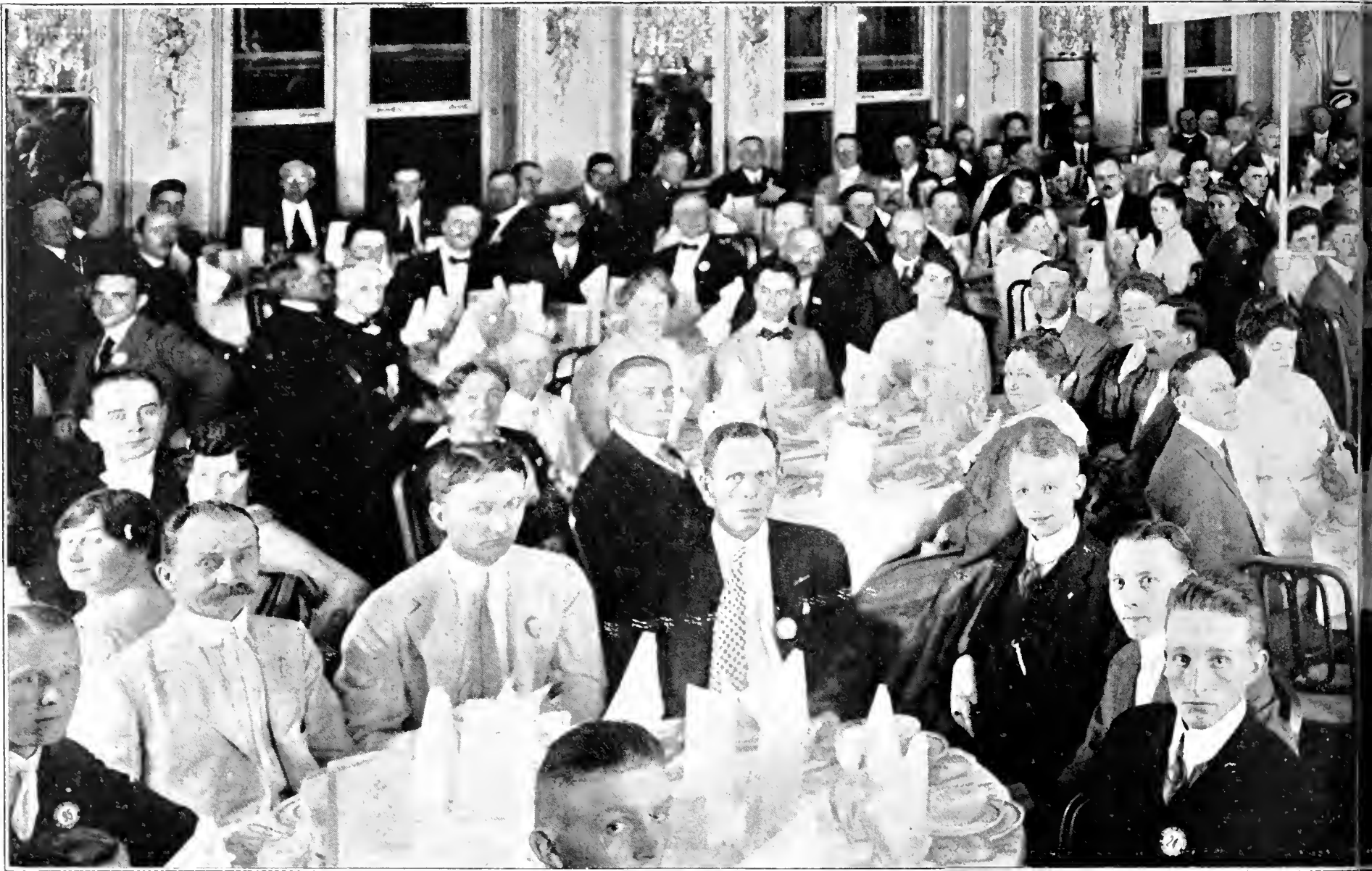
How to Make the Nursery Business Feed and Clothe Us and Pay Our Debts

Read by John Dayton, Storrs & Harrison Co., Painesville, Ohio, before the Philadelphia Convention.

I SUPPOSE I would be doing something not contemplated by our worthy program committee, if I answered the above question in a few words and quit, but they would be thusly: "Under present conditions, I do not know." Am not the seventh son of the seventh daughter, only the fifth, and in times like the present, who can shape a business policy that may not be entirely wrong thirty to sixty days in the future? Added to the difficulties of paying debts, clothing ourselves decently,

world. The government, the factories, highway interests, etc., are putting labor practically out of his reach."

Substitute nurseryman for farmer, and I believe the above statement is absolutely true. The farmer does raise some crops that are sure of a market at some price, or can be carried for a future market. Nursery products are dug and ready for sale, and must be sold or destroyed. A few more difficulties we are squarely up against, high prices of all material we have to use, and



The Philadelphia Convention Dinner was voted an immense u

buying bread, possibly butter, in normal times, we have to shoulder a few more problems now, that I cannot attempt to answer.

If the Allies are successful in ending the war in six months to a year, what? In two years, what? In three to four years, what? If Germany wins in six months to four years, what?

I quote "The farmer is engaged in the most hazardous business in the world. He is the plaything of nature, and the child of chance. He never knows what he is going to raise or what it will bring him when he gets it. He has to compete in the labor market with the whole

they are absolutely indispensable, lumber, nails and metals of all kind, packing material, paper, twine, and so on through the list: 100 per cent advance is common, and many things unobtainable, unless contracts are made at high prices, long in advance. Labor, at least in most sections, advanced 50 to 100%, and absolutely unobtainable in quantities needed at any price.

In Mexico a much displayed advertisement reads "The Beer that made Milwaukee jealous" and it certainly was enough to make a poor Eastern nurseryman jealous last spring to read that the employees of a Western concern had struck for a raise from \$1.70 to \$2.00 per day, while

we could not get enough men at \$2.50 to \$2.75 per day, and the quality of those obtained far below par.

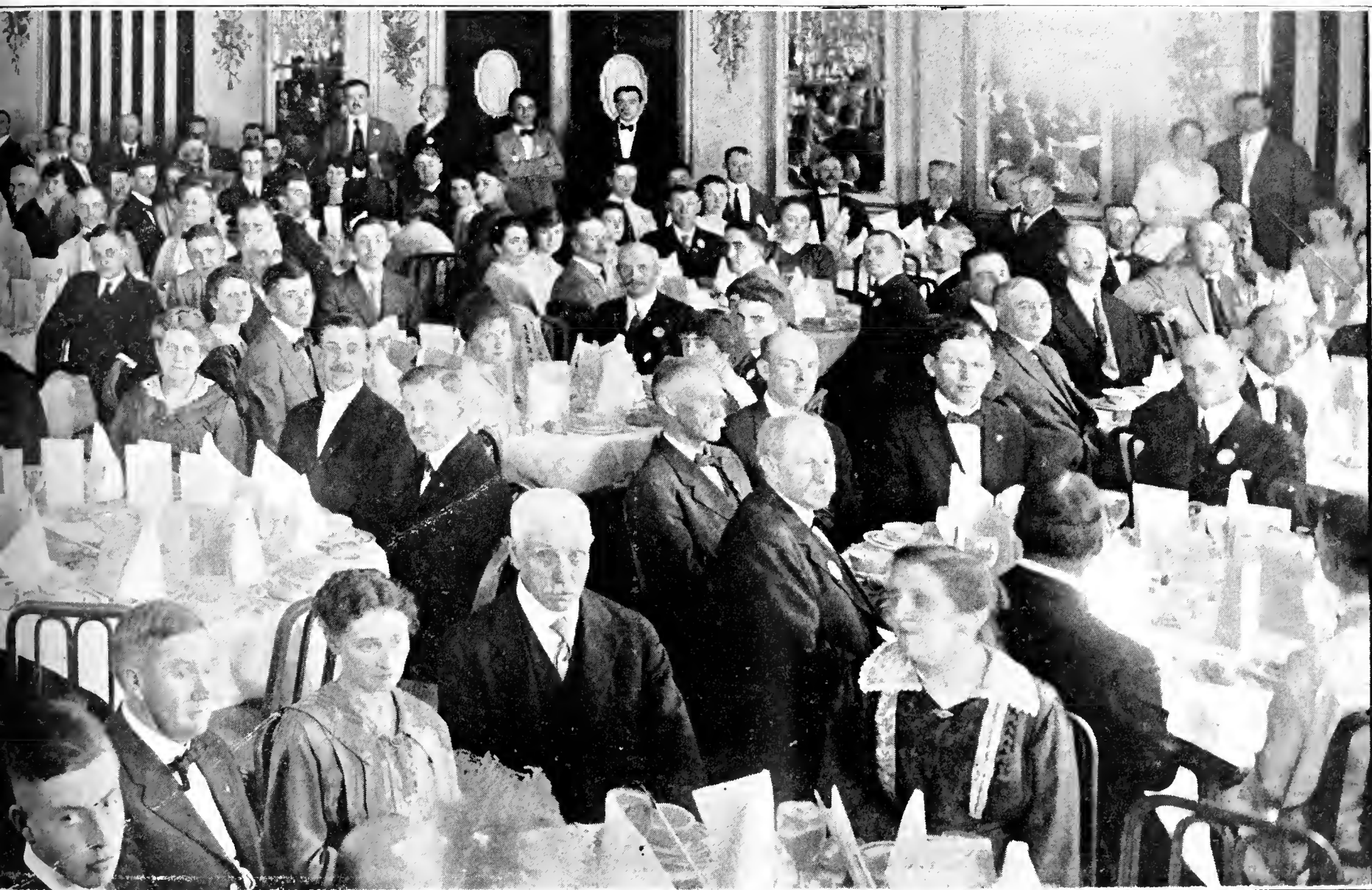
Transportation, both freight and express, at least in some and possible in all sections, entirely undependable. We trucked a fair share of our express matter to little stations five to fifteen miles away last spring in order to get it moved at all. How much we lost in orders not sent, because our customers could not depend upon freight service and how many orders we turned down, that in normal times, we would have bought stock for, I do not know, but certainly a large amount. Absolute embargoes on many roads, and against many cities, lasting three to ten days, in the rush of the busy season, adding to the complication and loss.

Quarantine, at the rate we are going, it will be but a few years, until the avowed purpose of some of our en-

impossible under present conditions. A little paring can be done, and a few economies introduced by most firms, but most of our expense items are already much increased with every probability of still larger increases in the near future.

Second—Raise prices on what products we do sell. Ha! 'tis easy, "ring the butler and give the order, but why in the name of—well you supply the word, when people are paying more for every article they buy, necessities or luxuries, should nursery products stay at the same old price, or in many cases during the past year at as low or lower prices than ever before, and echo answers, why?

I see that the question of prices is on our program, and will be presented and discussed by abler men, but as far as I can see it is the paramount issue to be solved, if a



, and proved the Quaker City is not always as slow as reported.

tomological friends is accomplished, and shipments out of our own state or importations from outside the borders will be prohibited, and most of us, safe in the precincts of a bankruptcy court or in the arms of a receiver, can look back and mourn over days of selfish interest in our own business and lack of co-operation with fellow nurserymen.

It seems to me that there are but two things that a man or firm can do, when business does not feed, clothe and pay his debts, and I want to add to that, make a fair per cent. of profit—

First—Cut expenses, but to any large extent, this is

satisfactory answer is to be given the subject assigned me, and a subject that cannot be hammered at too much or given too much attention at this convention.

Let us think of a few evils that stand in the way of fair values—Say Department stores, the basis of today's success is efficiency, as possibly shrewdness was the quality demanded by the last generation and is still depended upon by most nurserymen. Now the Department Store is efficient, and I have no quarrel with it, and it may prove to be so efficient, that it will be the best and possibly the main way by which our stock will be delivered to the consumer, but why in the name of common

sense, should they buy our products at less than cost, and at a less price than we will sell them to the trade? We paid seven to nine cents each for apple trees the past season, plus the freight and boxes, and the same firm sold the same grade of trees to Department stores who retailed them over the counter at ten cents each, three for twenty-five cents. Of course, they are glad to, and can sell them cheaper than we, their money is probably invested thirty days or less, and if they clean up two per cent, it is good business. If we could make twenty-four per cent, a year on our investments, think we would be satisfied, but again, the question, why is their money better than ours, and why should they buy stock at less than regular trade rates? The nurseryman's investments, even in one year seedlings is locked up a year, on most fruit products he locks up capital, two to four years and on many ornamental products still longer time, and can make but one turn-over in one to six or more years.

Take our dear old friend "Surplus." A note in a late trade paper says "10,000 trees sold at Western New York point to be shipped to Long Island and delivered to customers at ten cents each." Car loads of good trees No. 1 in all ways, were loaded in cars, shipped hundreds of miles, loaded on wagons and peddled out to planters at ten cents each the past spring. Will not every purchaser who bought at the above price, think in the future that every nurseryman who asks him a fair price is a robber? We can all figure on about how the grower of the stock that was sold as above came out. He lost money, but how can matters be improved? If the grower has late in the season, say 50,000 peach left in his cellar with no demand, and gets an offer of say \$10.00 per 1,000 that helps him out of the hole \$500.00, and most of us are so built that we will grab the \$500.00, in spite of the fact that we know the trees will be sold to planters at a price away below the cost of production and probably injure the market for our own and all other nursery products in the future years far more than the small gain made.

Problem after problem, and real trouble after trouble, might be enumerated, but we have talked and written and resolved and combined for these many years and gone home to cut prices and do business in the same old way. Some times we have started out resolved to keep our plantings at a reasonable amount, to hold our stock at a reasonable price that would afford a fair margin of profit or burn it up, but how soon our good resolutions are as the dew on a sunshiny morning, or if we hold through a season, we find that one man "cannot live unto himself alone" and that it takes more than one individual to correct trade abuses that have existed for years.

We may as well realize that all, or practically all of these things from which we suffer, and about which we complain are of our own introduction and making, and that if they are ever corrected, we are the only ones who can do it. At the same time, we are always prone to think that the other fellow's business is not as peculiar as ours, that they can correct abuses, adopt better methods and make money far easier than the nurseryman. I doubt it. Have even heard painters recently complain of bitter competition. There are about 250,000 business corporations in the country, 100,000 have no net income, 90,000 make less than \$5000.00 a year, and only 60,000 make \$5000.00 and over annually. Now I believe that

any man who has successfully established a nursery business is of more than the average intelligence, although he is probably a born gambler. Our problems are large, our investments are threatened, but there is surely a way out. Such a country as ours is bound to use both fruit and ornamental stock in ever increasing quantities for any average number of years and planters are perfectly willing to pay for what they want, a price that will allow the grower a fair profit, but as long as they are offered stock at ten cents by one man, and anywhere from fifteen cents to \$1.00 by others, as long as one guarantees stock to grow, another replaces at half price and the third disclaims all responsibility, after delivery to the Transportation company.

So long in fact that as a trade we have no standard terms, or grades or prices, no selling methods, other than to find out what the other fellow's prices are and cut them, no ideas of planting, except if we made money on one item this year to largely increase our plantings of the same and kill our market as soon as possible, so long as we continue to deal wholly as individuals, with no care for the success of the other fellow, so long as we blind competition instead of intelligent organizers, so long will our creditors continue to push us off the map by scores, after every period of depression, caused either by business, poor growing seasons, low prices of fruit, or the plantings of our own products.

Our only hope is co-operation and standardization, realizing that co-operation means at least equality in giving as well as getting. That an accepted standard once adopted should be absolutely adhered to. That we all have got to give up some pet methods and work for the good of the trade, as well as the individual.

It is dead certain that no one group can ever raise themselves very high by trying to pull another down, and just as certain that for a few seasons at least, we could much more profitably clean our own house, correct our own business methods, than to spend the time searching for the defects of the other fellow and trying either to put him out of business or induce him to do business in our own way, or not at all.

We must agree on certain standards, we must realize that two trees even of the same size and age are not always of the same value. We must have some minimum price on standard articles fixed so that both producers and planters will understand that prices beneath that are below actual value, and that there is some reason, either honest or dishonest for such offers being made. We must rise or fall together, and honestly educate ourselves to co-operate in plantings, methods of sale, value of products, and then altogether educate our customers to know what our standards and methods are, and that in dealing with a member of the National Association of Nurserymen they are assured of honest goods, a square deal and money back, if not as represented.

First—Cut all unnecessary expense, but do not figure so close on help that stock will suffer, or your blocks produce second or third grades which should be first.

Second—Fix a fair price so that if the stock sells it will give a profit allowing for increased cost of both growing and selling.

Third—Stick to your prices.

Fourth—Do not figure that everybody else is hard up

and will decrease their plantings, that you will keep yours up or increase, make your planting list to correspond with the demand for your own products.

Fifth—If the first war year proves to be a blighter on our business, borrow a little more and pull through, better years are bound to come.

Sixth—Keep your chin up, your feet on the ground, your faith in God and the United States at white heat. Your faith in the nursery outcome still hotter, and know that the Lord helps those who help themselves, and that 500 nurserymen working together, each willing to give the other 499 members and everyone of their customers an absolutely square deal and we will be as near sure to succeed as anything subject to human control can be in this world.



J. R. MAYHEW, Waxahachie, Texas,
Vice President,
American Association of Nurserymen.

TEXAS NURSERYMEN'S ASSOCIATION

*Program Texas State Nurserymen's Association
Summer Session at College Station, Texas*

THURSDAY AFTERNOON, AUGUST 2nd, 1.30 to 5 P. M.

President—Will B. Munson, Denison.

Vice President—J. M. Thompson, Waco.

Secretary-Treasurer—Jno. S. Kerr, Sherman.

Call to order by President Will B. Munson.

Address of Welcome - Prof. H. Ness, College Station, Tex.

Response to Address of Welcome,

J. M. Ramsey, Austin, Texas

Relation of the Large Grower to the Small Grower.

Sam. L. Dale, Daingerfield, Texas

The Effect of Spring Freezes on Tropical and Sub-Tropical Fruits in the Rio Grande Valley.

George J. Boyer, San Benito, Texas

As to getting better and more efficient publicity would it be advantageous to take membership in some State Organization fitted for such purposes?

J. R. Mayhew, Waxahachie, Texas

Some Recollections, Observations and Suggestions.

F. T. Ramsey, Austin, Texas

The Importance of the Home Orchard and How to build it - J. S. Kerr, Sherman, Texas

Home Beautification as a Factor in our Domestic and National Well-being - J. B. Baker, Ft. Worth, Texas

The Importance of Evergreen Planting in Texas

H. G. Strayhorn, Tyler

Note:—The time for this session is so arranged as to not conflict with the sectional meetings of the Texas State Horticultural Society, nor the Texas Farmers Congress so that members of one can attend the sessions of the others.

Note:—The regular annual meeting of the Texas Nurserymen's Association will be held September 25th and 26th at which time the President's address and report of the Secretary-Treasurer will be presented. The place for such annual meeting will be selected at this summer session.

Note:—Membership dues should be sent to the Secretary at once so as to secure your position in both the summer and fall edition of the Badge Book. If you pay \$5.00 for inspection dues are \$2.00; if \$7.50, dues are \$3.00; if \$10.00 or more dues are \$5.00. Allied trades dues all \$5.00.



PETER YOUNGERS, Geneva, Nebr.,
Treasurer,
American Association of Nurserymen.

THE EMPIRE RED RASPBERRY

C. G. Velie & Son, Marlborough, N. Y., are offering a new raspberry, which has unusually good qualities according to reports of those who have grown it. It originated in 1904 with L. E. Wardell, Marlborough, N. Y. and was obtained by crossing Ruby and Contant.

The New York Experiment Station reports it as being exceptionally free from disease, berries average larger than the Cuthbert and about the same color. It ripens a little earlier and has a longer picking season. The fruits may be ranked among the best in quality, being of good flavor, keeps well.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

Editor ERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., July 1917

THE CONVENTION Every nurseryman who has been attending conventions in the past and was present at the Philadelphia one, could not help but be impressed by the contrast. Instead of being a social outing and general good time, with a little business on the side, it was practically all business virility with a definite aim, a business meeting or rather a series of them to advance the interests of the trade.

The spirit that was evident showed the motives to be right and powerful, sore spots in the trade are being hunted out, high standards raised and important actions set in motion.

The numerous problems as outlined in President Watson's Address are being met by assigning them to specialists to consider, analyse and apply the remedy so that the greatest amount of good to the greatest number will result.

Mistakes can hardly be avoided, but no right minded person can say they are not pardonable when the motive is right.

Who would not prefer a wound or even death in action to a slacker's personal safety?

In the business world, let us be business like. If the nurserymen have a business interest in uniting let that union be steady, efficient and progressive.

It is hardly to be expected that the co-ordination of conflicting interests can be accomplished without heart burnings and resentment but as the single-mindedness and unselfish purpose becomes more apparent, antagonism to the new order of things diminishes. This was amply illustrated by a prominent member, who had practically given in his resignation, but when the intent of the association became more apparent decided to "see it through."

If the personnel of those responsible for the policy of the Association be considered there need be no fear of the aim of that policy.

The only danger, if danger there be, is in attempting to model a Nurserymen's Association along the exclusive

lines of other trade associations. The production of their goods will always be beyond the control of a trade association. The nursery trade not only overlaps with the florist and other allied trades, but it is so fundamentally connected with the welfare of the country that the governments both federal and state are vitally interested, in fact it is evident from the government machinery already in motion that it considers the nursery business its own special care.

A lack of breadth of vision was indicated in the discussion on publicity. It will have to extend further than the selling of stock, even to the point of elevating to a degree every man, woman and child in the country. The less selfish a policy a nursery trade association has, the greater will be the measure of success.

In other words, it is improbable that a nursery trade association can be modeled along the selfish lines of other trade associations, but will have to depend more upon a closer co-operation of all who are interested in the growing of plants.

The point has been reached where war is waged literally by whole nations. Every man, woman, and child is involved, and nearly every adult and most boys and girls can be efficient factors. We are in this war for the purpose of defending our rights, of making sure that, as a Nation, we shall be able to live the sort of life and to have the sort of institutions we desire, of making democracy persist in the world, and of safeguarding the world against the recurrence of such a war as this. To accomplish this, the Nation must aim at the perfection of organization, and therefore each individual must recognize the necessity of making sacrifices for the common good and more than ever of working under limitations—of doing team work. Our people have a genius for organization and they will not fail in the task they have assumed. Our farmers, on whom a great responsibility rests, are the most efficient farmers in the world when they do their best. They will not be found wanting in this crisis.—DAVID F. HOUSTON, *Secretary of Agriculture*, June 12, 1917.

TO REFOREST NORTHERN FRANCE

Editorial from the Philadelphia Bulletin.

It is interesting that the nurserymen of the country, assembled here in convention, are considering the proposal of reforesting Northern France at their own expense. This is the plan of Prince Poniatowski, a name familiar to all students of Napoleonic literature, and while our nurserymen cannot do all of the replanting of fruit and shade trees which the Boches have destroyed, they seem willing to do their share and to make it easy for other philanthropists to co-operate.

It is well known that as the Germans have been driven back from their original line they have left only a desert behind them. Everything has been destroyed except the soil, and that has been so badly cut up that it will be long ere it produces its normal yield. The annual crops are to be restored much sooner than the vineyards, orchards and shade trees. It will be remembered that Professor Ferrero tells in one of his histories that in a

single year Spartacus and his revolting gladiators did more damage to Italy than Hannibal did in seventeen. This was because the latter destroyed simply the annual crops, which meant the loss of only a year's income, but by the time of Spartacus the olive and the vine had replaced grain in Italy, and it took years to replace them.

That is the case with Northern France. It needs fruit trees and vines to replace those which were destroyed, and several years will be necessary to restore former conditions. It may be that the nurserymen will start a propaganda among the children. It would be easy for any child to save enough to buy a peach or apple-tree cutting, to purchase a vine or even a young maple. Northern France is about as bare as the sands of the seashore, and here is an excellent chance to do some constructive work which will cost individuals little but will amount to much in the aggregate.

NEWLY ELECTED OFFICERS OF THE AMERICAN ASSOCIATION OF NURSERYMEN

Lloyd C. Stark, Stark City, Mo., was elected President.

J. R. Mayhew, Waxahachie, Texas, Vice President.

Peter Youngers, Geneva Nebraska, Treasurer.

Curtis Nye Smith, 19 Congress St., Boston, Mass., Secretary.

The decision in regard to the place of the next convention was left in the hands of the Executive Committee. While not officially stated, all signs point to Chicago, Illinois.

TREASURER'S REPORT

Peter Youngers, Treasurer, in his report gave:

Total amount received	\$13,487.50
Vouchers Paid	8,126.43

Leaving a balance on hand June 28, 1917	5,361.07
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Obituary.

GEORGE PATTINGTON, SR.

Mr. George Pattington, Sr., died May 20th, 1917, at his home in Aurora, N. Y., at the age of 82 years.

Mr. Pattington came from England at the age of 18 years and established the present business of George Pattington & Sons in 1868. He was one of the pioneer nurserymen in that part of the country and was well and favorably known for his honesty and fair dealing.

The sons, W. H. Pattington and George Pattington, Jr., will carry on the business.

NELSON BOGUE

Nelson Bogue, proprietor of the Bogue Nurseries, Daws, New York, died May 28.

Mr. Bogue was born January 24th, 1844, was prominently connected with horticultural and educational interests of his state.

He founded the Batavia Nurseries and was also extensively interested in the breeding of Morgan horses and Jersey cattle. He is survived by two brothers in the nursery business; Vigil Bogue, Albion, N. Y., and Duane Bogue, Medina, N. Y.

The following is a register of the early arrivals:

Adams County Nursery, The, Aspers, Pa.
 Allen & Co., The W. F., Salisbury, Md.
 Andorra Nurseries, Chestnut Hill, Philadelphia, Pa.
 Atlantic Nursery Co., Inc., Berlin, Md.
 Barnes Bros. Nursery Co., Yalesville, Conn.
 Barnes Nurseries, (College Hill), Cincinnati, Ohio.
 Bay State Nurseries, The, North Abington, Mass.
 Beloit Nursery Co., Beloit, Wis.
 Bennett, C. A., Robbinsville, N. J.
 Benton Review Shop, Fowler, Ind.
 Blair, Samuel E., 656 Centre St., Nutley, N. J.
 Bobbink & Atkins, Rutherford, N. J.
 Bohlender & Sons, Peter, Tippecanoe City, Ohio.
 Breck-Robinson Nursery Co., Lexington, Mass.
 Brown Brothers Company, Rochester, N. Y.
 Bryant's Nurseries, Princeton, Ill.
 Burr & Co., C. R., Manchester, Conn.
 Champion & Son, H. J., Perry, Ohio.
 Chase Brothers Co., Rochester, N. Y.
 Chase Co., The Benjamin, Derry Village, N. H.
 Chase Co., The R. G., Geneva, N. Y.
 Chase Nursery Co., Chase, Ala.
 Christy Color-Printing-Eng. Co., Inc., Rochester, N. Y.
 Clinton Falls Nursery Co., Owatonna, Minn.
 Cole, W. B., Painesville, Ohio.
 Conard & Jones Co., The, West Grove, Pa.
 Cooper & Rogers, Winfield, Kansas.
 Davis Nurseries, Franklin, Baltimore, Md.
 Dayton Fruit Tree Label Co., Dayton, Ohio.
 De La Mare Printing & Pub. Co., 438-448 West 37th St., N. Y.
 Des Moines Nursery Co., Des Moines, Iowa.
 Dreer, Henry A., Inc., Philadelphia, Pa.
 Drummond, W. A., Oriole Ave., St. Louis, Mo.
 Elizabeth Nursery Co., The, Elizabeth, N. J.
 Ellwanger & Barry, Rochester, N. Y.
 Elm City Nursery Co., New Haven, Conn.
 F. & F. Nurseries, Springfield, N. J.
 Farmer Nursery, The, Minneapolis, Minn., Route 2.
 Forest Nursery Co., R. F. D. 2, McMinnville, Tenn.
 Foster-Cooke Nursery Co., Fredonia, N. Y.
 Framingham Nurseries, Framingham, Mass.
 Fraser Nursery Co., Huntsville, Ala.
 George, D. S., Penfield, N. Y.
 Great Northern Nursery Co., Baraboo, Wis.
 Greening Nursery Co., Monroe, Mich.
 Griffing & Co., C. M. Inter-State Nurseries, Macclenny, Fla.
 Griffith, R. B., Fredonia, N. Y.
 Grootendorst & Sons, F. J., Boskoop, Holland.
 Haines Co., Robt. B., Cheltenham, Pa.
 Hardyzer, H. M., Boskoop, Holland.
 Harrison's Nurseries, Berlin, Md.
 Hart, Geo., Lynbrook, L. I., N. Y.
 Hartman & Son, W. H., Dansville, N. Y.
 Heurlin, Julius, So. Braintree, Mass.
 Hicks & Son, Isaac, Westbury, L. I., N. Y.
 Hill Nursery Co., Inc., The D., Dundee, Ill.
 Hillenmeyer & Sons, H. F., Lexington, Ky.
 Hobbs & Sons, C. M., Bridgport, Ind.
 Hoopes, Bro. & Thomas Co., West Chester, Pa.
 Hoyt's Sons Co., Inc., Stephen, New Canaan, Conn.
 Hubbard Co., T. S., Fredonia, N. Y.
 Hunt & Co., W. W., Hartford, Conn.
 Huntsville Wholesale Nurseries, Huntsville, Ala.
 Hgenfritz Sons Co., I. E., Monroe, Mich.
 Jenkins & Son, J., Winona, Ohio.
 Kelly Brothers Wholesale Nurseries, Dansville, N. Y.
 Kille, Willard B., Swedesboro, N. J.
 Knoxville Nursery Co., Knoxville, Tenn.
 Kohankie & Son, Henry, Painesville, Ohio.
 Lane, Joseph J., Garden City, N. Y.
 LaSalle Comnty Nursery, LaSalle, Ill.
 Le Clare, J. F., 6002 Utrecht Ave., Brooklyn, N. Y.
 Lovett, J. T., Little Silver, N. J.
 Maloney Bros. & Wells Co., Dansville, N. Y.
 Maney & Sayre, Geneva, N. Y.
 Marshall Bros., Arlington, Nebr.
 McFarland Co., J. Horace, Harrisburgh, Pa.
 McFarland Publicity Service, Harrisburg, Pa.
 McHutchison & Co., 95 Chambers St., New York.
 Meehan Co., Thos. B., Dresher, Montgomery County, Pa.
 Meehan, Thos. B., & Sons, Germantown, Pa.
 Moon, Wm. H. Co., Morrisville, Pa.
 Morse Company, Inc., The A. B., St. Joseph, Mich.

Muller, Adolf, Norristown, Pa.
 Nelson & Sons Co., 140 So. Dearborn St., Chicago, Ill.
 Norman, T. R., Painesville, Ohio.
 Ouwerkerk, P., Weehauken, N. J.
 Pennsylvania Nursery Co., Girard, Pa.
 Peters, Charles M., Salisbury, Md., R. F. D. No. 3.
 Pilkington, J. B., Box 242, Portland, Oregon.
 Plumfield Nurseries, Fremont, Nebr.
 Pontiac Nursery Company, Detroit, Mich.
 Rakestraw-Pyle Co., Kennett Square, Pa.
 Reed, W. C., Vincennes, Ind.
 Rochester Lithographing Co., Rochester, N. Y.
 Roesch, Lewis, Fredonia, N. Y.
 Root's Nurseries, Manheim, Pa.
 Rouse & Son, Irving, Rochester, N. Y.
 Schifferli Nursery Co., F. E., Fredonia, N. Y.
 Shenandoah Nurseries, Shenandoah, Iowa.
 Sherman Nursery Co., The, Charles City, Iowa.
 Simpson & Sons, H. M., Vincennes, Ind.
 Skinner & Co., J. H., Station "A," Topeka, Kansas.
 Smith Co., W. & T., Geneva, N. Y.
 Southern Nursery Co., Winchester, Tenn.
 Stannard & Co., F. H., Ottawa, Kansas.
 Stark Bros. Nurseries & Orchard Co., Louisiana, Mo.
 Stark Nurseries, Wm. P., Neosho, Mo.
 Stein, Geo. E., Wrightsville, Pa., R. D. 1.
 Stone & Wellington, Toronto, Ont., Canada.
 Storrs & Harrison Co., The, Painesville, Ohio.
 Stuart & Co., C. W., Newark, N. Y.
 Successful Farming, Des Moines, Ia.
 Taylor & Co., H. S., Rochester, N. Y.
 Taylor & Sons, L. R., Topeka, Kansas.
 Texas Nursery Company, Sherman, Texas.
 Thomas & Sons, Jos. W., King-of-Prussia, Pa.
 Uhl, N. W., Dansville, N. Y.
 United States Nursery Co., Roseacres, Miss.
 Van Lindley Nursery Co., Pomona, N. C.
 Watson, John, Newark, N. Y.
 Waxahachie Nursery Co., Waxahachie, Texas.
 Weeks Nursery Co., Inc., C. H., Lyons, N. Y.
 Welch, E. S., Shenandoah, Iowa.
 West, T. B., Perry, Ohio.
 Westover Nursery Co., Clayton, Mo.
 Westminster Nursery Co., Westminster, Md.
 Wholesale Nurserymen's Travelers Protective Assn., 82 St.
 Paul St., Rochester, N. Y.
 Willis Nurseries, Ottawa, Kansas.
 Wohlert, A. E., Narberth, Pa.
 Wood-Stubbs & Co., Louisville, Ky.
 Youngers, Peter, Geneva, Nebr.



*No more money have I to spend,
 Not even a dollar my wife to lend,
 Philadelphia's all right, but more's the pity,
 It's too convenient to Atlantic City.*

AMERICAN ASSOCIATION OF NURSERYMEN

President—Lloyd C. Stark, Louisiana, Mo.
Vice-President—J. R. Mayhew, Waxahachie, Texas.
Treasurer—Peter Youngers, Geneva, Neb.
Attorney and Secretary for the Association—Curtis Nye Smith, Boston, Mass.
Executive Committee—John Watson, Chairman, Newark, N. Y.; J. B. Pilkington, Portland, Oregon; John H. Dayton, Painesville, Ohio; Henry B. Chase, Chase, Alabama; Theodore J. Smith, Geneva, N. Y.; J. R. Mayhew, Waxahachie, Texas; E. S. Welch, Shenandoah, Iowa; Lloyd C. Stark, Louisiana, Missouri.

CHAIRMEN OF COMMITTEES

Arrangements—Thomas B. Meehan, Dresher, Pa.
Arbitration—W. C. Reed, Vincennes, Ind.
Exhibits—Albert F. Meehan, Dresher, Pa.
Program—J. R. Mayhew, Waxahachie, Texas.
Report of Proceedings—Curtis Nye Smith, Boston, Mass.
Nomenclature—J. Horace McFarland, Harrisburg, Pa.
Tariff—Irving Rouse, Rochester, N. Y.
Press—Ralph T. Olcott, Rochester, N. Y.
Telegraphic Code—R. C. Chase, Chase, Ala.
Hail Insurance—Frank A. Weber, Nursery, Mo.
Publicity—F. L. Atkins, Rutherford, N. J.
Distribution—M. R. Cashman, Owatonna, Minn.
Legislation—William Pitkin, Rochester, N. Y.
Transportation—Charles M. Sizemore, Louisiana, Mo.
Landscape—W. H. Wyman, North Abington, Mass.

STATE AND DISTRICT ASSOCIATIONS

American Nurserymen's Protective Association—President, Irving Rouse, Rochester, N. Y.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.
American Retail Nurserymen's Protective Association—President, H. W. Marshall, Arlington, Nebraska; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.
Association Oklahoma Nurserymen—President, P. W. Vaught, Holdenville, Okla.; secretary, Jim Parker, Tecumseh, Okla. Next meeting during week of State Fair at Oklahoma City, last of September or first of October.
California Association of Nurserymen—President, John S. Armstrong, Ontario. Secretary, H. W. Kruckeberg, Los Angeles, Cal.
Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.
Connecticut Nurserymen's Association—President, Walter E. Campbell, New Haven, Conn.; secretary, F. L. Thomas, Manchester, Conn.
Idaho Nurserymen's Association—President, Anton Diedricksen, Payette, Idaho; secretary, J. F. Litooy, Boise, Idaho. No definite time has been set for next meeting. Probably in July at Boise, Idaho.
Massachusetts Nurserymen's Association—President, G. Howard Frost, West Newton, Mass.; secretary, Winthrop H. Thurlow, West Newbury, Mass.
Mississippi Nurserymen's Association—President, Theodore Bechtel, Ocean Springs, Mississippi; Vice-President, S. W. Crowell, Roseacres, Mississippi; Sec'y-Treas., R. W. Harned, Agr. College.
National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.
New England Nurserymen's Association—President, Harlan P. Kelsey, Salem, Mass.; Secretary, Charles Adams, Springfield, Mass. Annual meeting held on the last Tuesday in February.
New Jersey Association of Nurserymen—President, Carl H. Flemer, Springfield, N. J. Secretary-Treas., A. F. Meisky, Elizabeth, N. J.
New York State Nurserymen's Association—President, E. S. Osborne, Rochester, N. Y.; secretary, H. B. Phillips, Rochester, New York. Next meeting September. Probably at Utica.
Ohio Nurserymen's Association—President, T. J. Dinsmore, Troy, Ohio; secretary, W. B. Cole, Painesville, Ohio.
Oregon—Washington Association of Nurserymen—President, C. F. Breilhaup, Richland, Wash.; secretary, C. A. Tonneson, Tacoma, Wash.
Pacific Coast Association of Nurserymen—President S. C. Miller, Milton, Oregon; secretary-treasurer, C. A. Tonneson, Tacoma, Wash. Place of next meeting to be decided later.
Pennsylvania Nurserymen's Association—President William Warner Harper, Philadelphia. Secretary, Henry T. Moon, Morrisville, Pa.
Southern Nurserymen's Association—President, Harry Nicholson, Winchester, Tenn.; secretary-treasurer, O. Joe Howard, Pomona, N. Carolina.
Tennessee Nurserymen's Association—President, A. I. Smith, Knoxville, Tenn.; secretary-treasurer, G. M. Bentley, Knoxville, Tenn.
Tennessee State Florists' Association—President, Karl P. Baum, Knoxville, Tenn.; secretary-treasurer, G. M. Bentley, Knoxville, Tenn.
Texas Nurserymen's Association—President, William B. Munson, Denison, Texas; secretary-treasurer, J. M. Ramsey, Austin, Texas.
Western Association of Nurserymen—President, Lloyd C. Stark, Louisiana, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

The Future in Ornamentals

*Address before the American Association of Nurserymen at Philadelphia
by John S. Kerr, Sherman, Texas.*

THE progress of aestheticism among our American peoples is to determine largely the demand for ornamental nursery stock, and the nurserymen whom this grand American Association of Nurserymen embodies, largely are to determine as to the supply and the intrinsic efficiency and value of our ornamentals.

Let me say that the science of the beautiful or aesthetic among our people is rising by great strides, "By leaps and bounds" as it were. I figure that in the architecture both of buildings and of landscapes of our cities especially, 35% of the outlay represents ornamentation while 65% looks to utility. I will never forget a remark made by a Bostonian before this body at St. Louis some years ago, who was pleading for Boston as the next place of meeting of this Association; urging the claims of his city for her historic and other interests, and especially the great advancement of Boston as to culture, aestheticism, beautiful things to see, and to please the eye. Do you know he said "In these days of culture it costs more to feed the eye than it does to feed the stomach." My friends we are bound to admit the Bostonian is largely right.

We would not for a moment minimize the importance of food production nor the importance of its wise conservation and control as is now contemplated by our national administration, and while we give our unqualified support to every measure looking to a successful prosecution of our part in the world war, we as nurserymen must also grasp the fact that the science of the beautiful, as espoused and demanded by our people, is calling loudly upon us nurserymen for advancement in the production of a more efficient class of ornamental nursery stock and a higher development of our landscape architecture.

The field is so broad, so varied, so many nice details to be worked out, so much deep thought and skilled labor, to be called into requisition, yes so much patriotism, so much love of our people, our homes, our public grounds, our flora, of everything that makes America great, that to undertake a full consideration of the great subject of "The Future of our Ornamentals" would be a task I confess too great for me, and upon which I may offer only a few suggestions. I hope therefore there may be a full discussion of the subject from the floor of this assembly.

SOME REQUISITES AND PROBLEMS

First: We must possess faith, love and loyalty in our profession and love and loyalty to our American flora, as well as to adapted flora from related sections elsewhere.

Second: Ornamentals as such must possess intrinsic characteristics of beauty and attractiveness, which they can produce under the conditions in which they are to be placed.

Third: The influence of environment and consequently natural characteristics are prime considerations in the se-

lection and the developing of ornamentals for any given section.

Fourth: Upon the nurserymen of each distinct section of our country therefore devolves the duty of producing and furnishing ornamentals best suited to his section.

Then as to the first requirement, let me suggest that American nurserymen have fallen far short. We have followed too much in the beaten paths of our European and our American forefathers, have propagated and used in our plantings, have recommended in our catalogs, and have sent broadcast to our confiding customers, the easy to procure varieties, of plants, be they European or American, eastern, or western, northern or southern, rather than exercise ourselves to know, produce and provide classes and varieties adapted to the principle habitats of divisions of our country.

I mean to say that we have not shown that degree of love and loyalty and consequent self-sacrificing labor and business sagacity that the importance of the subject demands. Dr. Wilhelm Miller in his great book "What England can teach us about Gardening" says "England loves her trees and flowers more than we do ours" and further says "The only way we can make our gardens surpass those of England is by loving our own trees as they do theirs and by planting more American trees and flowers."

Second: To insure the intrinsic characteristics which make ornamentals valuable it is the duty of nurserymen and all plant lovers and devotees, including our Departments of Agriculture, both national and state, to spare no pains or reasonable expense in selecting flora from every possible source and testing and proving them as to their value as ornamentals for the various sections, and in propagating and distributing them. In this work many new crosses and hybrids may be created and disseminated, combining characteristics of both parents making them superior to any known varieties now extant.

Third: Our Great and Allwise Creator who made the great universe of worlds, also made this little world of ours and is bestowing great honors upon it with all of its appointments, and upon man whom He created "in his own image" with dominion, etc., and He made the hills, the valleys, the rivers, and every living thing for the good of man and for His own glory. "And all very good."

With all His wisdom, power and beneficence He created our flora, and He is still creating it to suit the varying conditions of this, His creation. By the aid of our botanists we can get some faint glimpses of the great wisdom and order displayed by the Creator in the thousands upon thousands of genera, of species and of varieties into which He has divided the flora of this world, and how He is utilizing the influence of environment and of nature's own laws of hybridizing and of reproduction, and the laws of the "Survival of the fittest" in adapting our

flora to its highest usefulness in serving divine purpose and the happiness and welfare of man.

For instance, the natural flora of the Atlantic coast sections for thousands of years, has been developed under the favorable conditions of good soil, good climate and ample moisture of that section, and has been added to and improved by the nurserymen and florists of that section, and has been supplemented by many adapted plants from oriental countries until the Rhododendrons, the Norway Maples, the evergreens and thousands of beautiful ornamentals grace your landscapes, which are a delight to the beholder, especially the admirer coming from the less favored sections of the West, the Northwest and especially the southwest.

I can say for the southwest that we have paid an enormous price to learn the lesson which the Creator intended us to learn. We have learned it after spending tens of thousands of dollars filling our Southwestern parks and gardens with your Atlantic coast flora, and trying to reproduce for ourselves and under our climate, the beauties we have enjoyed in the east, and have failed, only to look about us and see the possibilities and the beauties of the native flora which the Creator has for thousands of years been preparing for us, ever since he lifted the ancient prehistoric floods off this country and has subjected us to a climate peculiar and in many respects severe, and given us a virgin soil in many sections as "rich as the Valley of the Nile."

Come with me and I will show you western flora both evergreen and deciduous, both beautiful in flower and valuable in fruit, both perennial and annual, which actually revel and luxuriate in the canyons and among the rocks, with little or no rainfall and under merciless suns, and which under cultivation, domestication and hybridization are to be the foundations for our gardens and parks equaling if not surpassing in their unique attractiveness the gardens and parks of any other section. I will say too, there are many old standard plants which are also valuable to and are used by us. These two extreme sections of the northeast and the southwest will serve to establish my point.

Fourth: It is a fact and it is right that it should be, "The nurseryman sets the pace in horticulture" on the nurseryman and the florist devolves the duty of testing, propagating and disseminating the trees and plants grown in his section. Then it is true that as the nurserymen and florists discharge their duty so will the orchards, gardens and parks of the people prove successes or failures, allowing reasonably for after care and culture.

Allow me to say, I think the nurserymen and florists are now, and may perhaps have always been reasonably sensible of their duty in this respect, and have given much valuable time and spent large sums of money in creating and testing new varieties of trees and plants, have suffered many failures and disappointments, while scoring in a degree well merited successes. This branch of work also should and does have to some extent the help of the government both national and state in the collection and dissemination of trees and plants from both foreign and our own countries.

Notably we refer to the Plant Department at Washington, to Arnold Arboretum, to the Missouri Botanical Gar-

den, or Shaw's Garden and to many others of less note.

The nurserymen, florists and other tree and plant lovers of Texas are working vigorously for a Texas Botanical Garden.

Much as we appreciate these public efforts, I believe if like princely sums used in them, were accorded to the practical nurserymen composing the American Association that much greater results would be gained therewith, than anything we have enjoyed so far, because this class of work comes in their line and they have the work more at heart.

Finally again let me say, The Future in Ornamentals is an all important subject, and may well engage our best efforts in developing.

Time, space and my limited capabilities forbid me attempting to go into the enumeration of varieties for various sections, or the various methods or possibilities of producing new varieties, or into the varied effects to be produced by arrangement of classes and varieties, which belong to Landscape Architecture, these and many other phrases of the subject may and I hope will be brought out in discussions by this assembly.

REPORT OF THE COMMITTEE ON NOMENCLATURE

By J. Horace McFarland, Chairman.

Your committee takes pleasure in reporting substantial progress during the year.

There had been associated with the committee first appointed by the American Association of Nurserymen a similar committee appointed by the Ornamental Growers Association prior to the 1916 meeting. Subsequently the interested co-operation was secured of the American Society of Landscape Architects, of the American Pharmaceutical Association, and of the American Association of Park Superintendents, each of which appointed a carefully selected committee to work with your Committee.

Opportunity was afforded to the American Seed Trade Association, and to the American Society of Florists and Ornamental Horticulturists. Much correspondence was had with the former, but no practical co-operation resulted, while the florists have paid no attention whatever, so far as your Chairman is aware, to the important matters included under the heading of Nomenclature.

Each member of the Association has received ere this a copy of the "1917 Official Code of Standardized Plant Names," which we believe is the first publication of its kind ever issued in the world, designed not only to provide a uniform scientific nomenclature for objects in horticultural commerce, but to provide that Code from the standpoint of MAKING BUYING EASY.

It was the exceeding good fortune of the Committee to be able to secure the active and interested co-operation of Dr. L. H. Bailey in connection with the completion of that great world work, "Bailey's Standard Cyclopedia of Horticulture," which was published in March, 1917. This work had previously been chosen by the Association as its standard for the scientific names of horticultural objects. It was found, however, that there were certain radical differences which meant, if this determination was adhered to without intimate consideration, very great

confusion in the trade. For instance, and as but one example only, Bailey's Cyclopedia lists all of the Azaleas as Rhododendrons. While your committee has held sedulously to the nomenclature of Bailey's Cyclopedia for much more than 90 per cent of the cases where there were differences, it has varied from that authority in the direction of trade interest and trade simplicity.

Through the permission of the publishers, the Macmillan Company, and with the active assistance of Professor Bailey, the work of the American Association of Nurserymen and of the other organizations involved has been definitely and permanently recognized in the so-called "Finding List" which is presented on pages 3575 to 3610 found in the sixth volume of the Cyclopedia. It is these pages, which by the same permission, we have been able to reprint in the Official Code, after having at several extended sessions involving days and nights of close and difficult work applied our own designation in the shape of a star to the preferred nomenclature.

The preliminary statement in the Official Code and the "Suggestions as to the Manner of Using the 1917 Official Code in Compiling Catalogues" found in the same pamphlet, explain quite fully the importance of the work accomplished and the method of making it most useful.

That this work is important is in evidence when consideration is had of the many letters of approval received by the secretary of the committee after the issuance of the 1917 Official Code. Not only have many nurserymen recognized the immense advantage which it provided, but there has been recognition on the part of individuals, of garden clubs, of important scientific organizations, of trade organizations, of state horticultural societies, of state boards of agriculture and similar boards, of the Texas Nurserymen's Association, and of the authorities in the United States Department of Agriculture itself.

It is believed upon the evidence at hand that the American Association of Nurserymen has never interested itself in any work of so far-reaching a character as the preparation and publishing of this Code, nor has it ever done anything to bring it so prominently before many persons and organizations in the United States.

It is fully recognized that the issuance of this Official Code of Standardized Plant Names is but a part of the work committed to us. The committee was constituted, and its sessions have been continuously managed with the thought of aiding in completing, more readily and satisfactorily transactions in trees, plants, shrubs, roses, vines, etc., or in other words of MAKING BUYING EASY. This work cannot be considered as at all complete until there shall have been issued a list of common names as well as this list of scientific names.

It was found early in the doing of the work that there needed first to be prepared the definite authority for each particular plant, and further it was discovered that the work of obtaining, considering and adopting common names was much greater and more difficult than that of determining scientific names. Various authorities have been obtained, some of them by importation, and preparations have been made for carrying on the work toward

the issuance of the eventual official code of common names. It is believed that when this can be done a still greater facility in commercial horticultural transactions will be afforded. The continuance of the work toward this end depends upon the support provided by the constituent organizations. It may be possible to complete a list of common names within a year, but that is not by any means certain.

It is proper in presenting this report to call attention to the extraordinarily efficient work of the secretary of the committee, Mr. Harlan P. Kelsey. He has given of his valuable time and invaluable knowledge without stint. It is a definite fact that without this devotion to work which is for the benefit of all, it would have been impossible to have proceeded so far and so favorably in the direction of helping through the commercial business of selling trees and plants.

When the list of names of the gentlemen assisting on behalf of the other organizations is considered, it will be noted that we have had the help of men of extraordinary learning and capacity. Frederick Law Olmsted, for instance, easily the leading landscape architect of the United States, has spent many days in this work. The United States Botanist, Mr. Frederick V. Coville, is another of those who with Mr. Kelsey has done much work of importance which it would have been difficult to get anywhere else.

A financial report is made in due course. It does not show the facts. Early in the last year it appeared that if the members of the committee charged to the fund in its possession their personal traveling expenses there would be no money left to continue and complete the preliminary portion of the work. Even with the economy which resulted in the large contributions to the work involved in the paying of expenses individually, it later appeared that there was not money in sight to pay for the publication of the 1917 Official Code. Your chairman was able to secure the contribution of the cost of printing this code through the contribution by the Macmillan Company of New York of the use of the plates of the so-called Finding-List, and the contribution by the J. Horace McFarland Company of the cost of printing ready for sending out.

These various contributions of the members of the committee in expenses and of the interested and helpful business organizations, not directly related to this Association, totaled considerably more than all the money contributed by all the organizations to the support of this work. If it was not the fact that your chairman is an officer of one of the corporations involved, he would ask that a definite vote of thanks be extended not only to the members of the committee who have thus contributed considerably in cash and invaluable in work, but to the two helpful business concerns.

It is believed that there need be no doubt as to the value of continuing the work, which if not carried forward to the point of the issuance of the list of common names will be of less than one-fourth the usefulness that can occur should the work proceed.

Notes from the Arnold Arboretum

WISTERIAS. All the species and varieties of *Wisteria* have now been arranged on the trellis near the Forest Hills Road with the exception of the White-flowered form of *W. sinensis*, *W. japonica* and the double-flowered form of *W. venusta*. The first appears to be an exceedingly rare plant; it was found by Fortune in Chinese gardens and first flowered in England in 1849, and Wilson saw occasional plants on the cliffs near Ichang in central China. This plant has never been in the Arboretum. There was a plant in Francis Parkman's garden in Jamaica Plain which flowered in 1880 but has now disappeared; there is said to be a specimen in a garden in Connecticut, and there are two splendid old plants in gardens in Opelousas, Louisiana. It is wanted for the Arboretum collection. *Wisteria japonica* is a smaller plant than the other Asiatic species, with slender stems and small clusters of pale yellow flowers. This plant flowered in the Dana collection at Dosoris, Long Island, in 1879, and once many years ago produced a few flowers in the Arboretum. It is a native of the warmer parts of Japan, and not really hardy in the northern states.

There are two American species native of the middle and southern states; the best known of these, *Wisteria frutescens*, is the more northern plant and is a slender vine with short compact clusters of comparatively small fragrant flowers. It is a less showy plant than the other species but is interesting as the first of the *Wisterias* cultivated in the United States and Europe. There is a white-flowered variety (var. *alba*). A handsomer plant is *Wisteria macrostachya* from the Missouri-Louisiana-Texas region but fortunately perfectly hardy in Massachusetts. It has much larger flowers in longer racemes than the other American species from which it can be distinguished by its longer calyx-lobes and by the glandular hairs on the calyx and flower-stalks. A fine form of this plant was once common in gardens under the name of *Wisteria magnifica* which has often been incorrectly considered a variety of *W. frutescens*. Another form with blue and white flowers has been described under the name of var. *albo-lilacina*. *W. macrostachya*, although the flowers are less showy than those of the Asiatic species, is a beautiful plant which is too little known in gardens. The American *Wisterias* bloom later than the Asiatic species and prolong the *Wisteria* season for several weeks.

WISTERIA VENUSTA. The earliest of the *Wisterias* to flower is *W. venusta*, and although this plant had been sent to the United States and Europe for several years by Japanese nurserymen, nothing was really known about it until Wilson's visit to Japan in 1914 when he found that it was a distinct and undescribed species distinguished by broad clusters, not more than six inches long, of very large flowers on stems an inch and a quarter in length

and by the soft hairs which cover the lower surface of the leaves through the season. This plant, although it has long been grown in Japanese gardens where there are very large specimens, is not Japanese, and it is now believed to be an albino form of the blue-flowered *Wisteria* which is cultivated in Peking and other gardens of northern China but which has not yet been described by botanists or brought to this country. If this opinion of the origin of *W. venusta* is correct it should prove hardier than any of the other Asiatic *Wisterias* and perhaps make it possible to extend much further northward the successful cultivation of these plants. The flower-buds of *W. venusta* are well developed in the autumn and it is the easiest of all *Wisterias* to bring into bloom in the winter by artificial heat. There is a form with double flowers (var. *plena*) which is occasionally cultivated by Japanese florists and is known in England.

WISTERIA SINENSIS grows naturally in central and southern China, and is the common *Wisteria* in the gardens of the United States and one of the most vigorous of the hardy climbing plants of the northern hemisphere. In New England country gardens the flower-buds are often killed by cold, and it grows better on city houses where it is more protected than in the country. In the southern states, where it often grows to the tops of trees more than a hundred feet high, and in California it is seen in its greatest magnificence. The white-flowered form is the only variety of this plant which has yet been found.

WISTERIA FLORIBUNDA. This is the common Japanese *Wisteria* and is found growing naturally only in the central and southern parts of that country. It has smaller and more fragrant flowers in narrower and more open clusters than the Chinese plant, and blooms here ten or twelve days later. This *Wisteria* is one of the most generally cultivated garden plants in Japan, and Wilson found in a garden at Kasukabe a plant which extended over a bamboo arbor one-sixth of an acre in extent and was covered with flower-clusters which measured up to sixty-four inches in length. This garden form with the long clusters has been distinguished as variety *macrobotrys*. On wild plants the flower-clusters are sometimes not more than ten inches long, and in their length this plant varies greatly. There is a beautiful form with pure white flowers (var. *alba*) which is becoming common in this country, another with flowers which are pure pink or white more or less tinged with pink (var. *rosea*), and another with leaves blotched with yellow (var. *variegated*). There is also a double-flowered form (var. *violacea plena*) which was first sent to this country in 1862 and first flowered here in the garden of Francis Parkman at Jamaica Plain. Fortunately this form blooms very rarely, for the flowers are ugly, something which cannot be said of any other *Wisteria*. Although the Jap-

anese Wisteria is usually called *W. multijuga* in gardens, the oldest and correct name for it is *W. floribunda*.

EARLY-FLOWERING DIERVILLAS OR WEIGELAS. The earliest of these plants to flower in the Arboretum, and perhaps the handsomest of all the species, varieties and hybrids of Diervilla known in gardens, is the Korean form of *D. florida* discovered and introduced by Mr. Jack to which the varietal name *venusta* has been given. It is already a shrub here five feet tall and three or four feet through, and every spring is completely covered with dense clusters of rosy-pink flowers from an inch and a half to two inches in length. It is perfectly hardy, which cannot be said of all the garden Weigelas; it grows rapidly, and no shrubs can bear larger crops of flowers. There is a plant now in full bloom on Hickory Path near the Pecan tree, and another in the Shrub Collection at the end of the Diervilla Collection near the Cherry-trees.

DIERVILLA PRAECOX. This name has been given to an early-flowering plant which has been sent from Japan to Europe but is not a native of Japan and is not known in its wild state, although it is probably a form of *Diervilla florida* from northern China. In the hands of Lemoine, the French hybridizer, a number of beautiful hybrids or varieties have been produced and are now in flower in the Shrub Collection. Among the handsomest of these are Seduction with red flowers, Esperance with pink flowers, Avant Garde with pale rose flowers, Vestale with white flowers, Gracieux with pink and white flowers, Floreal with rose-colored flowers, Conquerant with rose-colored flowers, and Fleur de Mai with pink flowers. These are less known but hardier and better garden plants here than many of the hybrid Weigelas more commonly cultivated.

ROSA HUGONIS. Judging by its appearance this year, no plant sent from China to our northern gardens equals this Rose in grace and beauty. The long gracefully arching branches are so thickly covered with flowers from end to end that the petals touch and make a continuous band of pale yellow. The individual flowers are about two and a half inches in diameter and have a delicate perfume; the leaves are small and pale green. It is a hardy and fast-growing shrub, and has every appearance of becoming a large plant. Perhaps no other single-flowered Rose is so beautiful, although the Cherokee Rose, another Chinese Rose (*R. laevigata*) naturalized in the southern states, has handsome foliage and larger flowers, but the flowers of the Cherokee Rose are white and are not produced in such profusion, and in the north the Cherokee Rose can only be grown under glass. *Rosa Hugonis* and *R. omeiensis*, a tall-growing, white-flowered species from Western China, are the earliest Roses to flower in the Arboretum this year.

ROSA ECAE. This is another yellow-flowered Rose which is blooming well this year in the Shrub Collection and is only a little later than *R. Hugonis*. It is a spiny shrub with small leaves and pale yellow flowers not much more than an inch and a quarter in diameter. It is a

native of Afghanistan where it is common on dry mountain ridges, and of Samarkand. Much less beautiful than *R. Hugonis*, it is worth a place in a collection of Roses, for species with yellow flowers which are hardy in this climate are few in number.

SYRINGA KOENNEANA. This Lilac, which flowered for the first time in the Arboretum two years ago, is bearing a much more abundant crop of flowers than it has produced here before. It is a native of northern Korea, and is a very large, vigorous and hardy shrub with slender branches which bend under the broad open clusters of small rose-colored or pink flowers with long, slender corolla-tubes and not much perfume. The leaves are large, pointed and covered below with a coating of pale hairs. While it is not one of the handsomest Lilacs, it is an interesting addition to the number of species of this genus which can be successfully grown here. There are two large specimens, which have been in the Arboretum since 1902, on the bank next to the Forsythias at the lower end of the Lilac Collection.

AESCULUS BRIOTHI. This is a form of the so-called red-flowered hybrid Horsechestnut (*Aesculus carnea*) and is now in bloom in the Aesculus Collection on the right-hand side of the Meadow Road beyond the Linden Group. It is the most brilliantly colored of all the forms of *Aesculus carnea* and few trees hardy in this climate bear such showy flowers. This tree begins to bloom when not more than eight or ten feet high; it is perfectly hardy and should be seen more generally in American gardens.

AESCULUS GEORGIANA. This shrub, which is a native of central Georgia, is flowering freely again this spring and is now covered with its compact clusters of yellow and rose-colored flowers. This interesting and handsome shrub is able, apparently to support perfectly the New England climate, and it is one of the handsomest of American shrubs made known and introduced into cultivation by the Arboretum.

AESCULUS DISCOLOR. The scarlet-flowered variety (var. *mollis*) of this Buckeye is blooming again this spring in the Arboretum, and there now seems little doubt that this southern shrub, or small tree, can adapt itself to New England conditions. On the typical *Aesculus discolor* the flowers have a red calyx and yellow petals generally more or less flushed with rose. It is a much less common plant than the variety *mollis* on which both the calyx and the corolla are bright red. The variety is a common plant in Georgia and Alabama, and ranges west to southeastern Missouri and to eastern Texas. *Aesculus discolor* and its varieties can be distinguished from other American Buckeyes by the soft covering of pale down on the lower surface of the leaflets, and from all species of the genus except *Aesculus californica* by the pale orange-brown color of the seeds. *Aesculus discolor*, var. *mollis* is an important addition to the list of shrubs with brilliant flowers which can be successfully cultivated in northern gardens.

Mr. I. Paschall, Advertising Manager for the "Farm Journal," speaking at the Nurserymen's Convention on Sales Promotion Advertising, said: "In analyzing the subject, the problem is getting more and larger buyers. We must first find out why they don't buy, then why they don't buy more?"

He pointed out the necessity of teaching the distributors how to sell the products of the goods, that it is necessary to increase the demand for fruit, so as to increase the demand for fruit trees. The point of attack, for the selling of fruit trees, must be through the stomachs of the people.

In the present stage of the nursery business, he advocated publicity, rather than specific advertising of the nursery products, and called attention to the fact, that the farmers of the country are the greatest potential buyers.

He urged a sensible standard of practice and ideals based on good business sense. It is necessary to make the tree salesman have a good opinion of himself, and for the nurseryman to realize, that neither knocking nor cut prices pay.

As an illustration of what standardization of quality will do: he quoted the orange growers as having doubled their sales in the last three years.

Mr. J. J. Hazen of W. P. Stark Co., Mr. Lane of the Garden Magazine, Mr. White representing "The Agricultural Publication Association, W. F. Thirkildason, of the Atlee Burpee Co., also spoke on the subject.

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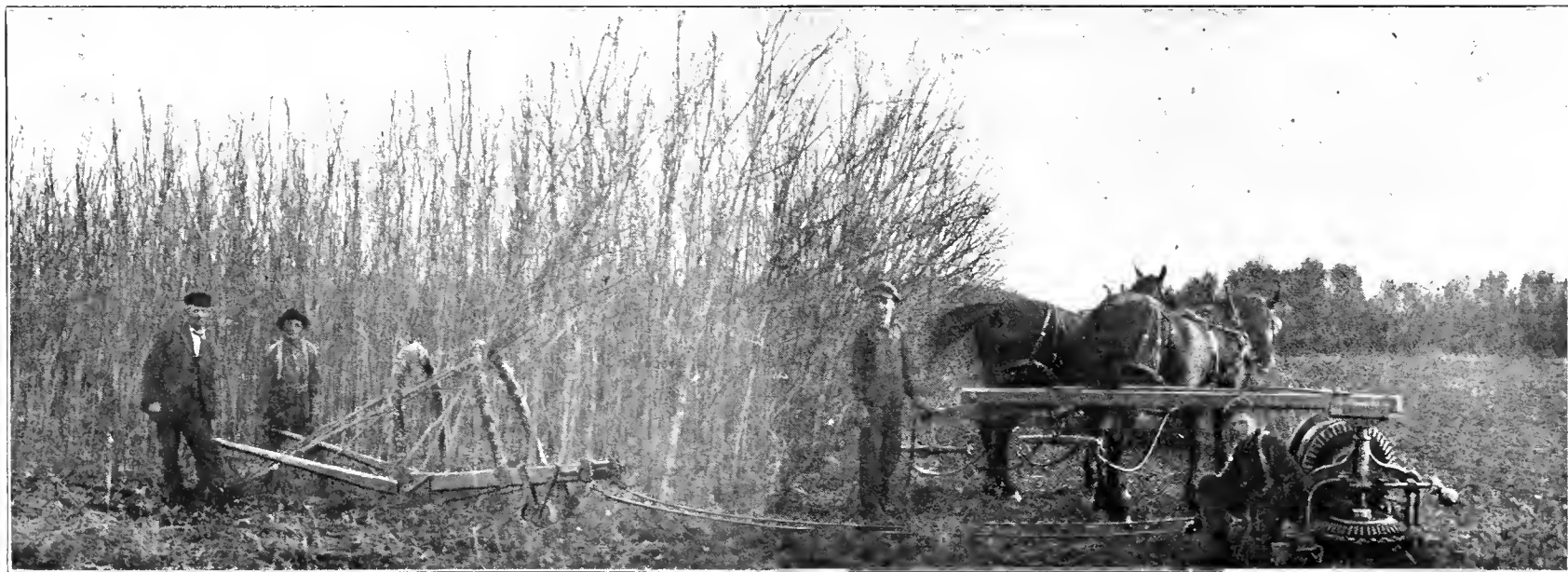
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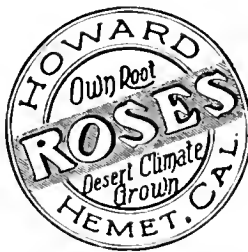
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3,000, 1¼ in.
5,000, 1½ in.
5,000, 1¾ in.
4,000, 2 in.
3,000, 2½ in.
2,000, 3 in.
1,000, 3½ in.
1,000, 3½ in.
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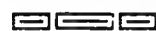
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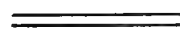
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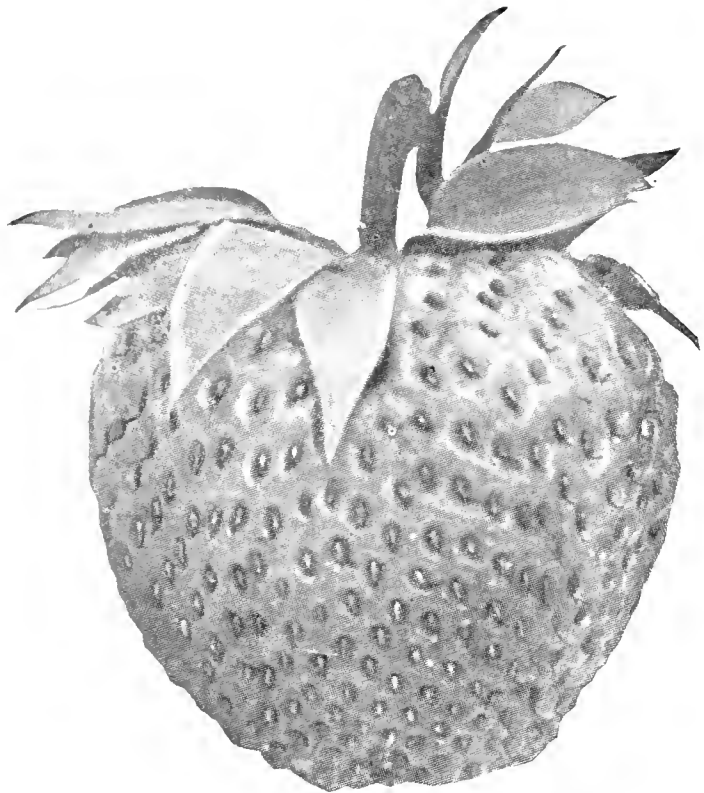


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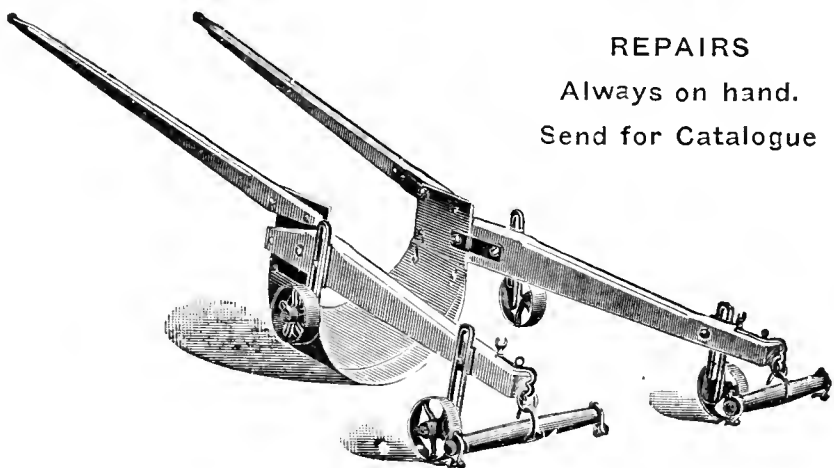
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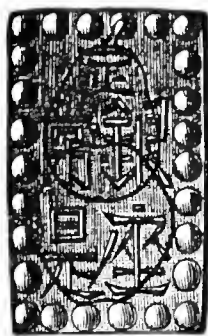
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T. S. HUBBARD GO.
FREDONIA, N. Y.

The longest established and best known growers of

Grape Vines

And the largest stock in the United States



CURRENTS and GOOSEBERRIES

A fine stock of leading varieties. One and two years.

BLACKBERRIES

The largest and best stock of root-cutting plants in this country. All the best varieties. Snyder in great quantity. Our blackberry plants are as well furnished with fibrous roots as our well-known grape vines.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of
Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX
and
HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY
GENEVA, N. Y.

70 Years

1000 Acres

When writing to Advertisers please mention the National Nurseryman.



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE

THE

North-Eastern Forestry Co.
CHESHIRE
...Connecticut...



Where we grow "The Stock Too Good for Department Stores."

A block of young Conifers and Shrubs adjoining our new office building, with Ford Container in the rear. Acreage planted now is 175 acres in stock; good blocks to dig this fall; sidetrack laid and storage-cellar and packing-house building.

Particular buyers who want something better than ordinary quality are invited to visit us and see our stock. Price and size do not determine quality.

PRINCETON NURSERIES

Wholesale Only

(But not to Department Stores)

Princeton,

New Jersey

J. H. Skinner & Co.

Topeka, - Kansas

Apple Seedlings

Japan and French
Pear Seedlings

Forest Tree Seedlings

FRUITS TREES

SMALL FRUITS

Rhubarb, Myatt's Linnaeus, divided roots, pure stock; Shade Trees, including a fine lot of Soft Maple and White Elm.

CATALPA BUNGEI

6½ foot stems, straight and smooth

Bechtel's Double Flowering Crab

Ornamental Shrubs

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

**Rawhide Brand of Shipping
Tags and Tree Labels**

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

ORNAMENTAL

TREES, SHRUBS, VINES, EVERGREENS
HARDY HERBACEOUS PLANTS

225 Acres

Entirely devoted to the growing of the
best quality of ornamental nursery stock.

WHOLESALE ONLY

We also grow the "unusual" things, you
cannot find elsewhere.

Small Trees and Shrubs for
Planting in Nursery Rows.

We shall have our usual supply for Spring
delivery. Catalogue ready January first.

RAFFIA HEADQUARTERS

Supply of our usual brands on hand at
all times.

Thomas B. Meehan Co.,
WHOLESALE NURSEYMEN
Dresher, - Penna.

French Seedlings

If yours arrived complete—in good condition—well-graded
and properly packed—promptly handled and at minimum
importing expense,—stick to your present source of supply.
We can't offer more. But—if you didn't get all this,
our customers did and if you are interested, we will refer
you to some of them in your own state and you can ask
them about DELAUNAY'S grading and packing and the
service and expense. The proof of the pudding is the
pudding, you know.

War conditions in France—labor shortage, use of land for
food crops, etc.,—make seedlings scarce this year. We
can take care of our regular customers and some others.
Complete 1917-1918 list is ready. Ask for it. Ask De-
launay Customers anywhere what they think about his
stocks and our service.

John Watson & Company
NEWARK - NEW YORK

Agents for
F. DELAUNAY, Angers, France.

For Fall of 1917

*WE will have our usual line
of Ornamentals, Shade
Trees, Perennials, Apple,
Plum, Cherry, Peach, etc.*

C. M. Hobbs & Sons

Marion County

Bridgeport, - - Indiana

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa.

STARK BRO'S

Extra Heavy 2-Year Grape

Leading varieties, especially Concord. Strong tops and big roots, greatly preferred by the Retail Trade. Our heavy Extra No. 1 2-year grades will please your customers and cost no more than the ordinary No. 1 grade usually offered.

The vines we grow in Erie Co., Pa., in the fine grape soil along the South shore of Lake Erie, are unsurpassed.

In addition to Concords, we will have Moore Early, Niagara, Worden, and other standard varieties on which we will be pleased to quote.

Special prices for early buyers—send us your want lists.

Stark Bro's Nurseries LOUISIANA, MO.

Grape Nurseries in Erie Co., Pa. Best Grape Soil in America

The Best In Nursery Products

We carry a full line of fruit and ornamental trees, evergreens, shrubs, etc. Send us a list of your wants.

A FEW SPECIALS

Oriental Planes from 1¼ to 3 inch caliper. A large stock of Sugar Maples, American Elms, Carolina Poplars, Lombardy Poplars, Beech grafted River's, and Fern-Leaved, Double Flowering Japan Cherries, Prunus Pissardi, Flowering Apples, Flowering Peaches, Magnolia Tripetela, Japan and American Judas, Japan Walnuts, American Arbor Vitae, Hemlock and Norway Spruce, Altheas, Forsythias, Philadelphus, Viburnum Plicatum, Weigela, Eva Rathke, etc.

10,000 Downing Gooseberries, 2 years No. 1.

HOOPES BRO. & THOMAS COMPANY

THE WEST CHESTER NURSERIES

Established 1853 West Chester, Pa. Incorporated 1907



BERRY'S Wholesale Nursery

Small fruit plants in variety; rhubarb; horseradish; California Privet; Barberry Thunbergii; Hydrangea P. G.; Spiraea Van Houghti; Peonies, etc.

See list before placing your order.

P. D. BERRY,

Dayton

Ohio

We Are Prepared To Supply The Trade

ROSES, Field-grown, own roots and budded.
ABELIA GRANDIFLORA. Transplanted, field-grown.
BERBERIS JAPONICA.
AZALEA INDICA (Home-grown)
GARDENIAS.
ENGLISH LAUREL.
MAGNOLIA GRANDIFLORA.
MAGNOLIA FUSCATA.
OLEA FRAGRANS.
CAMPHOR (pot-grown.)
LIGUSTRUM JAPONICUM, LUCIDUM, NEPALENSE,
and other good varieties, fine bushy plants.
SATSUMA ORANGE. Field-grown, budded on Citrus
Trifoliata.
BIOTA AUREA NANA (Berckmans' Golden Arbor-
vitae)
BIOTA AUREA CONSPICUA.
RETINISPORA. In variety.
JUNIPERUS. In variety.
WISTARIAS. Grafted, best sorts.
APPLES.
JAPANESE PERSIMMONS.
ENGLISH WALNUTS.
MULBERRIES.
SPIRAEA THUNBERGII. A beautiful lot of stocky
plants.

A fine stock of Hackberries, Koelreuteria, Tulip Poplar, Magnolia Purpurea, Texas Umbrella, Sycamore and Elms.

Send us a list of your wants and let us give you quotations.

P. J. BERCKMANS CO., Incorporated
Fruitland Nurseries, Augusta, Georgia

ENGLISH NURSERY STOCK

GROWN IN LARGE QUANTITIES

RHODODENDRONS, a splendid lot this season, fine bushy plants. Plenty of the hardy Catawbiense named varieties suitable for the American climate including the newer and superior kinds, and well budded plants for forcing. AZALEAS, ANDROMEDA, KALMIA and other American plants in great variety.

CONIFERS a large stock, of all hardy kinds.

HARDY ORNAMENTAL, EVERGREEN and DECIDUOUS TREES. These at right prices.

ROSES. Dwarfs and Standards, all leading kinds in quantity.

CLEMATIS AND CLIMBING PLANTS.

FRUIT TREES Espalier trained pyramids and bush fruits in quantity.

FRUIT TREE STOCKS, APPLE, PEAR, PLUMS, etc.

A general assortment of hardy outdoor stock. Glad to answer inquiries.

No Agents. Write direct for wholesale catalogue to

WALTER CHARLES SLOCOCK, Goldsworth Nurseries, Woking Surrey, England

Half an hours rail from London & S. W. Ry., Main Southampton Line.

Over thirty years successful trading in the states.

Cable Slocock Woking A B C Code 5th edition used.

HIGH GRADE FRUIT TREES

We are offering for Fall and Spring delivery a large and fine assortment of Apple, Pear, Peach, Plum, Cherry and Quince trees.

Planted Right

Grown Right

Sold Right

Delivered Right

Send us your inquiries—It will be to our mutual advantage.

KELLY BROS.
Wholesale Nurseries, Dansville, N. Y.

—Strawberry Plants—

All of the standard varieties, also good stock of Progressive everbearing. We have ideal soil and climate to produce the best of strawberry plants, which make our prices possible. Shipping season from October fifteenth to May fifteenth. All plants are tied in bundles of twenty-six for twenty-five, and packed with damp moss in ventilated boxes. Each plant guaranteed first class and true to name. Before placing your orders write us for prices.

BUNTINGS NURSERIES

Box 2

SELBYVILLE, DELAWARE

Selbyville ships more strawberries than any other one town in U. S.

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Fall 1917

GRAPE VINES—One and two years old. Varieties largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas. Free from weed seeds, all recleaned and guaranteed first class.

Correspondence solicited. Price list upon request.

CHAS. M. PETERS

P. O. Address, Salisbury, Wicomico County, Md., R. F. D. 3

Long Distance Phone and Telegraph, Salisbury, Md.

The Framingham Nurseries

200 Acres

High Grade

Trees, Shrubs,

Evergreens,

Vines, Roses,

Etc.

Fine Stock

of

Rhododendrons

Kalmias

and

Andromedas



Send for Price List

W. B. WHITTIER & CO.

FRAMINGHAM, MASS.

We have a splendid stock of

Grape Vines

and other small fruit plants for the Nursery trade, graded up to the highest standard and sure to please you.

Give us a trial order, send in your list now for quotations

A. R. WHELOCK

SUCCESSORS TO
WHELOCK & CONGDON

North Collins,

N. Y.

P. OUWERKERK,

No. 216 Jane St., Weehawken Heights, Hoboken, N. J.

Rhododendrons, Clematis, H. P. Roses, Hardy Azaleas, Paeonies, Magnolias, Box Trees, Fancy Conifers, Hydrangeas and Shrubs, our specialties at our HOLLAND NURSERIES. Some of the goods on hand here during the packing season.

Watch the Advertisements in
THE NATIONAL NURSERYMAN
They Bring the Answer
Address HATBORO Office for Rates

Hill's Evergreens

You can work up a good profitable trade in Evergreens if you have the right kind of stock. Our main specialty for over half a century has been the propagation of young Evergreen stock for the wholesale trade in immense quantities at low prices.

We have all the leading varieties in small sizes, for all purposes, suitable for lining out to grow on for your trade.

Nurserymen who have heretofore depended on Europe for their young Evergreen plants can now be assured of a good reliable source of supply right here in America, and we solicit the opportunity of quoting on your requirements.

"Made in U. S. A." and "American Stock for American Planters" should, from now on, more than ever, be the slogan of American Nurserymen for it means "money saved in the long run" to start with nice, strong, sturdy, vigorous American-grown stock which has been produced right here in America.

YOU want to keep posted on Evergreens;

WE want to become better acquainted with you;

Let's get together.



The D. HILL Nursery Co., Inc.

Evergreen Specialists

LARGEST GROWERS IN AMERICA

Box 401

-

Dundee, Ill.

Native Trees, Shrubs and Vines

At Special Prices
WHOLESALE ONLY

Sweet Hollow Nurseries

WEST HILLS, HUNTINGTON

Long Island,

-

New York

C. Van Kleef & Company

Nurserymen

BOSKOOP,

-

HOLLAND

Specialties: Kalmias, Andromedas, Ilex opaca, crenata, glabra, Azalea viscosa, nudiflora, calendulacea and arborescens, Cornus florida rubra, Vaccinium corymbosum and macrocarpa, etc., etc.

Representatives:—

John Van Kleef and John A. Driesprong

From 1 February until 1 June

Care Maltus & Ware,

14 STONE STREET

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NEW YORK

Sell This New Rose Book
To Your Customers
100% Profit For You



IT is an invaluable working manual for rose lovers. Tells where, when and how to plant them most resultfully. Gives helpful pointers on such vital subjects as "Protection for Winter," "Pruning," etc. Indexes nearly 600 varieties for ready reference. Gives short suggestive lists for use in every imaginable place and for every conceivable purpose. Is profusely illustrated throughout its 121 pages. 16 pages in full color. Is neatly bound in cloth.

Your customers will want a copy of this Rose Book.

You can sell it to them and make 100% profit on every copy you sell.

We sell it to you for 50c a copy.

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Now is just the time when folks' minds are beginning to turn gardenward again.

Now is just the time, then, when the Rose Book sells best—when folks have the most time and greatest inclination to read such things.

Send for a trial lot of these sure-fire money-makers today, and let them make money for you.

We'll gladly send you further terms and a copy of the book if you so desire.

The Conard & Jones Co.
West Grove, Pa.

TRADE DIRECTORY

Price \$3.00, Postpaid

NATIONAL NURSERYMAN PUB. CO. Inc.,
HATBORO, - - - PA.

REMEMBER!

If its a hardy perennial or so called old fashion flower worth growing, we have it in one shape and another the year round. We have the largest stock in this country, all Made in America, and our prices—

Why say more here. Send for our Wholesale price list of varieties and benefit from the opportunities this affords you.

Our motto: "Maximum Quality, Minimum Cost."

Address, R. W. Clucas, Mgr.
Palisades Nurseries, Inc. Sparkill, N. Y.

You can save Time and Money

If you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

Sarachan & Rosenthal

64-66 Hanover Street

Rochester, - - New York

Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

Prepare for Fall by securing the best Cherry to be found. Our blocks of Cherry are the largest in the U. S. and quality the best. While the U Boats have been sending Mahalebs to the bottom the past two years, we have been fortunate in securing our usual supply and will have a splendid lot of trees to offer in the following:

CHERRY TWO YEAR general list of varieties

CHERRY ONE YEAR 11-16 up Sweets and Sours

PEACH ONE YEAR leading varieties

PLUM Japans, European and Hansen Hybrids

COMPASS Cherry and Apricots

APPLE leading varieties in connection with other stock only

Grafted English Walnuts and Northern Pecans

Special prices to car lot buyers on large orders

WE OFFER

Grape Vines, Currants and Gooseberries

in all varieties and grades

—also—

Grape and Currant Cuttings and Light

Grade of Vines for Lining Out

in Nursery Rows

WRITE FOR PRICES

F. E. SCHIFFERLI, Fredonia, N. Y.

We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER - - MARYLAND

We offer for Fall 1917

250,000 PEACH, 40 Varieties, 1 year buds

CALIFORNIA PRIVET, 1 year and 2 year

ASPARAGUS, 1 and 2 year

DOWNING GOOSEBERRY PLANTS, 2 year

BARBERRY THUNBERGI, 2 and 3 year transplanted

Can supply the above stock in car load lots or less, also, have a large stock of Rhubarb, Cumberland Raspberry Plants, Spireas, Deutzia Assorted, nice specimen plants. Evergreens, Horse Chestnut, N. Maple, Lombardy Poplar and Planes, etc.

We will make attractive low prices for early orders
Send List of Wants

For FUMIGATION With
HYDROCYANIC ACID GAS

"CYANEGBG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.
100 WILLIAM ST. - NEW YORK, N. Y.

WOOD LABELS

For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

Dayton Fruit Tree Label Co.
South Canal St., Dayton, Ohio

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXV.

HATBORO, PENNA., AUGUST 1917

No. 8

LOMBARDY POPLARS



Populus fastigiata

The Lombardy Poplar would be hard to dispense with in landscape gardening.

THERE is something about the Lombardy Poplar that makes it a general favorite, and extremely useful in semi formal landscape effects. It is a tree that always seems to blend well with its surroundings, and yet to be quite a contrast to most of our native trees, especially in outline. On almost every place, however small, there is a position that will be improved by one or more, either to im-

prove the sky line, soften the sharp corners of a building, or screen out some objectionable view.

In closely built up sections it is a general favorite for the latter purpose.

It is occasionally used as a street tree, and on a narrow street it really produces a wonderful effect.

After the everpresent monotony of the streets lined with Norway Maples, to come across one planted with Lombardies is quite a relief and looks almost like a visit to a foreign country.

On large estates it is not at all uncommon to find very beautiful effects where they are planted to line walks and create vistas, such as is shown in the picture.

Every tree has its good and bad points. The worst that can be said about the Lombardy is that it is short lived, usually reaching its maturity within twenty years and in many localities dying out within that time, but against this it is very rapid growing, rapidly responding to good treatment.

It is a tree that does not seem to rob the ground, it being possible to grow other plants right up to the base of the trunks. Note the Iris in the picture, with what other tree would it be possible to have such a display of bloom right at their bases?

The same result may be noted when growing very

close or even in a hedge. The detrimental effect on the hedge is very slight as compared with most other kinds of trees.

Professor J. G. Sanders, Harrisburg, Pa., reports a newly introduced poplar canker which threatens to be a serious menace. It is to be sincerely hoped the fears will be unfounded as it would be difficult to dispense with such an ornamental tree in landscape effects.

The tree that would make a good substitute, having the same general outline, is a form of the Ginkgo, *Salisburia adiantifolia*.

Many of the older trees to be seen growing in different parts of the country have a spreading habit and this is the form usually ascribed to the Ginkgo. There is some doubt if there is a fastigate form or if it is merely variable in habit according to conditions and treatment.

The late Edwin Lonsdale used to claim there were two distinct types and from observations made during the last ten years I am inclined to agree with him.

On a Pennsylvania nursery there are several hundred trees all true to the fastigate type and with no greater spread to the branches than a Lombardy poplar, and to all appearance they will retain this habit.

The Relations of the Wholesaler and Retailer

Read Before the Philadelphia Convention by M. R. Cashman, Ovaloma, Minnesota.

THE development of the nursery business during the past forty years in the United States has been so rapid that we scarcely realize the wonderful growth that has taken place in so short a time. Horticulture in itself is an intense study requiring close attention and patient labor to produce successful results. The nursery fraternities have been so deeply engaged in the solution of the big problem of supplying stock to take care of the planter's needs and the dealer's requirements that insufficient attention has been given to the development of a commercial organization to handle the distribution of their products. It is safe to say that so far as the progress made in the development of horticulture from a producing standpoint is concerned that the nurserymen have kept pace if not in many ways surpassed all other kindred enterprises. We find no cause to criticize the progress made in the development of the growing end or rather the propagating division of the nursery business, but I regret to state that I cannot find any such degree of advancement in the commercial field of the nurseryman's product. It is true of course that many concerns have perfected and are at the present time operating a very successful system in disposing of their products, but upon investigation we find that the practice and business tactics employed by these various concerns are very much at variance and it would be difficult to amalgamate two or more of them into one successful commercial system. When we enumerate the few suc-

cessful concerns engaged in the nursery business in the United States, we find that they are scattered over a very broad territory and the conditions surrounding each individual concern are very much different than that experienced by the others.

Climatic conditions is perhaps the most important and potent factor with which the nurseryman has to deal and of course he is forced to direct his business policies to meet the many perplexing problems thereby brought about. Thus we find a few and only a few successful nurserymen in this country, each one employing different business policies, but how about the many hundreds of nurserymen struggling for existence and operating under a self-made plan whose financial conditions would hardly allow them to be classed as successful nurserymen. We find this class comprises the greatest number of nurserymen all struggling hard for existence but with scarcely any success whatever and with little chance to improve in the face of present conditions. The small nurseryman in order to operate his business must be a farmer, an expert propagator, a fruit grower, a labor foreman, a soil specialist, a bookkeeper, a stenographer, a salesman, a financier, and besides all of this must be general advisor for his community in tree doctoring, tree pruning, spraying, handling and packing fruit; if he is a failure in any one of these vocations he is not considered a thorough nurseryman. He battles away trying to perform all of the functions connected with his calling and

thinks he is getting along fairly well until June 1st comes when he finds he has not made enough money during the entire year to pay his bills, he decides at once that there is something wrong but as most men of his class are liable to do he makes up his mind that he is not working hard enough so instead of working 12 hours per day he begins to put in 15; he does not have time to look about him and find out what the other fellow is doing, he does not attend any conventions or belong to any associations, in fact, he does nothing towards organizing and perfecting the commercial end of his business and thus he puts in his life struggling away for a bare existence. It is safe to say that if this nurseryman investigated conditions, he would find that there is something radically wrong somewhere and I do not hesitate to make the remark that after a thorough investigation he would tell us that some nurserymen are in a great measure responsible for his financial embarrassment.

I have studied this problem from the standpoint of a retail nurseryman and grower and while I am willing to acknowledge that the retail division of the retail business has been exceedingly careless and unbusinesslike in the exercise of their affairs, I cannot but feel that the greater part of the blame in this trouble should be placed directly at the door of the so-called wholesaler. Undoubtedly this statement will bring forth a storm of indignation from the wholesalers who read this paper, they will tell us at once that they have conducted their business in an honest and upright manner, furnished the retailers with stock at lowest possible prices, given them credit until their deliveries had been made, and otherwise extended courtesies that should at least merit the gratitude of every retailer who has had the fortune of dealing with them.

Now we are not denying any of these claims, in fact, we are ready to acknowledge the many courtesies afforded us from the reliable wholesalers, but what has the wholesaler failed to do that he might have done?—Has he done anything to protect the retailer in the field of trade; has he given him any encouragement in enlarging his business and directing the way to more extensive markets; has he done anything toward unifying and extending the hundreds of selling organizations maintained at big expense by the nurserymen throughout this country; has the wholesaler taken the lead in encouraging the sale of the most successful varieties; has he launched any campaign toward the elimination of suicidal methods and pernicious practices that have proved a boomerang and a paralyzing factor to the trade; has he undertaken to discourage the growing of worthless varieties that are so often substituted for valuable sorts because of their ease of propagation? I would like to ask—has the wholesaler ever undertaken to devise any means by which the retailer can learn in advance the various lines of stock that promise to be in big surplus each year, or on the other hand difficult to obtain because of small plantings? Does the wholesaler give out any information whatever regarding future prospects that might save the retailer thousands of dollars in the directing of his campaign that might otherwise be expended in disposing of much of the surplus that eventually finds its way to the brush pile? Has the wholesaler suggested or encouraged any kind of publicity to enlarge the demands

for nursery stock, and finally has he ever designated who is a nurseryman and who is entitled to buy his stock at wholesale and receive trade lists?

Now these are just a few of the pertinent queries that the retailer directs at the wholesaler at this time, these are important and we cannot say that any effort whatever has been made up to this time directed toward the carrying out of a single one of these pre-eminent questions. Is it any wonder that there is a strained relationship existing between the retailer and the wholesaler?

Now I would suggest to the wholesalers a program that in my opinion would eventually eliminate many of the criticisms offered by the retailers. I understand that the wholesalers have an organization maintained principally to determine who of the retailers are worthy of credit and who are not, I do not know that this association has for its purpose any other object. It may be that they know the quantities of stock that are available in the fields of the growers throughout the country, but if they do, the retailers have never learned it. Why could not this wholesale organization establish a bureau, employing a competent man with proper assistance whose duty it would be to gather statistics and compile aggregates of all the marketable and available nursery stock being grown throughout the country? This bureau could be made a bureau of information and from time to time issue bulletins to the wholesalers who in turn could mail them to their trade. These bulletins besides giving out the quantities of stock offered for the following season could also point out any particular items that are especially long or short. In this way the retailer could be advised to direct his efforts toward the sale of varieties that are more likely to be in surplus and on which prices would be reasonably low instead of allowing his salesmen to continue selling varieties already out of the market. This bureau could also be used as a bureau of research and by dividing the various states into horticultural districts give out valuable information on many of the varieties now being propagated. Many dealers throughout the country are selling worthless varieties simply because they don't know any better; these varieties go to the planters and of course prove a damage instead of a benefit, thereby discouraging the planter and causing him to give up the idea of commercial fruit growing.

I maintain that the best plan to promote commercial orcharding is to encourage the setting of varieties most valuable and best adapted to the particular location in which the orchard is located. There are hundreds of land owners scattered throughout the length and breadth of this country that have been at one time ambitious to plant and operate an extensive commercial orchard but because of being sold and furnished with worthless varieties on the start soon gave up the idea with a firm conviction that it could not be made a success. This has all been brought about through the failure of the nurseryman to make a study of conditions and to be prepared to furnish the most valuable varieties that would instead of discouraging the planter bring him success and stimulate increased operations. The wholesalers' bureau in giving out publicity to this one important question could do a vast amount of good toward the sale of nursery stock. The bureau could also be a bureau of

publicity and I want to say right here that the nursery business seems to be the very last organization of trade to recognize the wonderful results derived through publicity. The only publicity we have today in our business is the traveling salesman and the few catalogs mailed out by the mail order houses. The publicity committee have undoubtedly covered this subject thoroughly, so I will pass this, by simply calling your attention to it. The wholesalers' bureau could also be used as a means to suppress the pernicious practices indulged in by both the wholesaler and retailer. One of these, and I believe the most damaging practice known to the nursery trade, is the mailing out of wholesale lists to persons and others not engaged in the selling or distributing of nursery stock. I am satisfied and free to state that were it not for the damaging effect of wholesale prices made by many wholesalers and retailers as well as to park boards, landscape gardeners, cemetery associations, farmers clubs, and in fact almost anyone making application for wholesale prices, that we would all be enjoying our share of the present prosperity instead of being compelled to acknowledge that there is no money in the nursery business. It is an actual fact that the damage already done thru' the mailing of wholesale prices to those outside of the business has become alarming. The retailer does not complain of the amount of business done or the quantity of stock supplied through the distribution of these wholesale lists but he does complain of the vast amount of business actually lost to the retailer, and in fact, to the entire nursery fraternity through this pernicious practice.

Now I believe that if all nurseries issuing wholesale lists could be brought to the realization that a wholesale list placed in the hands of a planter, landscape gardener, or park board is ruinous to the trade, they would discontinue the practice immediately. Cheap prices do not sell goods but cheap prices are the most effective weapons that I know of to fight salesmen with. Now the wholesalers should get together study the conditions and in so far as they are able remedy all of these evils. The wholesaler cannot get along without the retailer and the retailer will not be in the market for stock unless he is able to dispose of it through his salesmen. Many retailers employ catalogs as their salesmen to sell their stock but I am sure you will agree with me that the greater part of the nursery stock sold throughout the rural districts is disposed of through traveling salesmen. Now it is my opinion that the ultimate success of the nursery business depends entirely upon the maintenance and the protection of the traveling salesman, if you eliminate him from the field you have put out of business the most effective instrument through which our products are sold. Ninety per cent. of all the nursery stock distributed in the northern states is sold by personal interview, and at least 50% of the mail order business done in those same states is the result of a canvass made by some traveling nursery agent. This being true, there can be no question that the traveling salesman is necessary to maintain our trade and does it not follow that the salesman must be protected in the territory where he is operating? I have spent nine years as a traveling salesman covering territory in Minnesota and adjoining states, I have devoted the past eleven years in handling men working directly

out from our office; my efforts have been directed mainly in employing capable salesmen that are dependable in every way, but I must confess that we have lost many a desirable representative because he refused to continue in a business that afforded no protection whatever to the salesman in the matter of prices. Here's an example of an interview with one of our salesmen—"what is a No. 1 5-6 ft. apple tree worth?" I replied "\$5.00 per dozen." He comes back like this "I called upon a certain prospect today and he asked me my price, I told him \$5.00 per dozen, he then showed me a wholesale list from a wholesaler in Illinois quoting apple trees at 10c a piece, is there 400% profit in the nursery business?" Then again this same salesman is detailed to call upon a park board in a neighboring town and this park board is in the market for a carload of trees; we quote a price covering the cost of stock laid down at that station plus a reasonable commission for the salesman's work; the bids are opened and it is found that some wholesaler in Iowa or Illinois or perhaps New York has quoted a price even lower than we could buy this same stock ourselves in carload lots. Is this protection or encouragement to a salesman, and above all what kind of an impression does it make upon the public? The result of this kind of competition is that the order is placed with the wholesaler; every member of the board that purchased the trees has a few friends and neighbors and some of these may have placed an order with the agent, they compare prices and decide at once that the agent is a holdup artist, a highway robber and every other agent that calls at that place from then on gets a very cold reception. Word goes out in that community that a place has been found where trees can be purchased at wholesale, they all get the lists because the park board continues receiving them and having no use for them hands them to his next door neighbor, and so they are passed around doing very little good in the way of increasing the sale of nursery stock but a very effective weapon against the retail agent who calls with the view of selling an order. Now this retail agent is interested mostly in his own welfare and after he encounters a few cases of this sort, it does not take him long to decide that the tree business is no place for an honest man and offers no inducements in which to make a living.

Now, gentlemen, do you think that the wholesalers through a central bureau and through co-operation could remedy these practices? I am satisfied that they can and I firmly believe that the retailers are entitled to protection and encouragement from the wholesaler. All we ask is that you make wholesale prices only to those engaged in the business, and if you wish to sell at retail, we offer no objection but we do want you to quote a price no lower than we are compelled to ask for the goods when we buy from you and resell through our salesman who receives a commission. Competition is the life of trade and fair competition injures no one. Those of us who employ traveling salesmen maintain an organization that means extra cost and extra expense in order to give the service demanded by the public. The unscrupulous salesman is being weeded out and if we were not compelled to fight the mail order circular we would soon be able to maintain in the field an operating force that would require double the amount of the present quantity of nursery stock produced to supply our needs. There

is not an over-production of nursery stock in this country today but there is a lamentable lack of effective selling organizations caused entirely by the ravages of mail order price lists.

It has been proposed that the retailers form a protective association with a central bureau the mission of which would be to detect the surplus list offenders, and furnish information to the retailer so that no patronage would be forthcoming to anyone guilty of such violations, but why should this be necessary? Can't the wholesalers themselves see the handwriting on the wall and why should they not themselves take steps to eliminate the abuses of which the retailers, your patrons, complain? The American Association of Nurserymen has been in existence many years and while they have succeeded in standardizing grades and varieties and have developed to a wonderful degree the growing end of the nursery business, there has not yet been any standardizing of retail prices or retail ethics. We need to standardize the retail value of every grade and variety of tree produced, and we should also take immediate steps to systematically increase the output of our products. Let us make an effort to put the nursery business upon a workable basis that will bring a reasonable measure of prosperity and honor to everyone engaged in it.

In conclusion I wish to say a word about the landscape gardener who receives surplus lists and wholesale prices from almost every nurseryman doing a wholesale business. Now the landscape gardener is not a nurseryman, neither is he an agent for any nursery, he is not in the business of selling nursery stock but he is in the business of drawing plans and specifications for those intending to plant shrubs and trees. We all know that the landscape gardener's strongest argument in securing contracts is that he can buy all of the stock needed for the planting at wholesale and thereby save the planter more on the cost of the stock than the landscape gardener charges for his plans. He demands from the nurserymen wholesale prices but he is not acting as the agent of the nursery, in fact, he has declared that the party for whom he does the work is his client and acts as his agent. Why should a landscape gardener be entitled to a wholesale list any more than the planter himself if he wrote for it direct? I consider this one of the thorns in the side of the retail nursery business. I do not care from what angle you argue the question, you cannot place the landscape gardener in any different position than the building architect employed to supervise the construction of a building. Can he buy lumber, concrete, brick and any other material at wholesale prices? Can he argue with a proposed builder that by employing him he can secure lower prices on material than could be secured by the builder himself? Think this over and I am sure you will agree with me that the landscape gardener robs the nurseryman out of hundreds of thousands of dollars yearly that rightfully belongs to him. I am not blaming the landscape gardener, I am blaming the nurserymen for allowing any such condition to exist. There are many other questions referred to in this article that would in themselves require a lengthy article to properly discuss and I trust that the nurserymen interested in the correcting of these evils will continue this agitation until we receive some measure of relief.

President Lloyd C. Stark, of the American Association of Nurserymen has made the following committee appointments, subject to acceptance, etc.

ARBITRATION,

W. C. Reed, Chairman, G. A. Marshall, John Dayton, J. M. Pitkin, T. W. Stark.

ARRANGEMENTS,

E. S. Welch, chairman, (other members to be named)

EXHIBITS,

A. F. Meehan, Chairman, Wm. Flemmer, Jr., A. B. Howell.

NOMENCLATURE,

J. Horace McFarland, Chairman, Harlan P. Kelsey, F. L. Atkins, Chas. Malloy, L. A. Berckmans, Hon. Fred. Coville, honorary member.

TARIFF,

Irving Rouse, Chairman, L. A. Bobbink, Wm. P. Stark, J. W. Hill, Chas. E. Greening, Jas. McHutchison, J. C. Vaughan, D. S. Lake, W. H. Wyman, T. J. Smith, John Dayton.

STATISTICAL,

Henry Chase, Chairman, John Watson, Wm. Pitkin, E. S. Welch, M. R. Cashman.

DISTRIBUTION,

M. R. Cashman, Chairman, S. W. Crowell, Ollie Fraser, Chas. G. Perkins, Wilmer W. Hoopes.

LEGISLATIVE,

Wm. Pitkin, Chairman.
(other members announced later)

TRANSPORTATION,

Chas. Sizemore, Chairman, W. C. Reed, J. Hale Harrison, Jas. McHutchison, Robt. Chase.

LANDSCAPE,

Thos. B. Meehan, Chairman, J. Edward Moon, Paul C. Stark, W. H. Wyman, J. M. Pitkin.

FRENCH RELIEF COMMITTEE,

Chairman not appointed, E. S. Welch, W. C. Reed.

PROGRAM,

Henry Chase, Chairman, M. R. Cashman, Paul Stark.

FINANCE, (Sub-Committee of Executive Committee)

E. S. Welch, Chairman, E. W. Chattin, T. B. West.

ANNUAL REPORT,

Curtis Nye Smith, Chairman, John Dayton, John Watson.

ARBORETUM,

J. Edward Moon, Chairman, J. Horace McFarland, Henry Hicks, E. M. Sherman, J. B. Pilkington.

DIRECTORY,

M. R. Cashman, Chairman, John Dayton, Wm. Pitkin, E. S. Welch, John Watson.

PRESS,

Robt. Pyle, Chairman, Ralph T. Olcott, Arthur Hemming, J. R. Mayhew, W. F. Therkildson.

TELEGRAPHIC CODE,

R. C. Chase, Chairman, C. R. Burr, W. H. Stark.

HAIL INSURANCE,

Frank Weber, Chairman, E. P. Bernardin, H. D. Simpson, C. C. Mayhew, F. L. Atkins, Harry Hobbs.

PUBLICITY,

F. L. Atkins, Chairman, H. Hicks, J. Horace McFarland, Chas. Greening, Robt. Pyle.

CURTIS NYE SMITH, *Secretary*.

An Echo of the Philadelphia Convention

A very enjoyable side trip, was participated in by several prominent Western Nurserymen, after the adjournment of the Philadelphia Convention.

The party left Broad Street Station of the Penna. R. R. at 6.30 a. m. Saturday, bound for Narberth, Pa., and on arrival were met by Mr. A. E. Wohlert, whose office and nursery are located about a mile from the station.

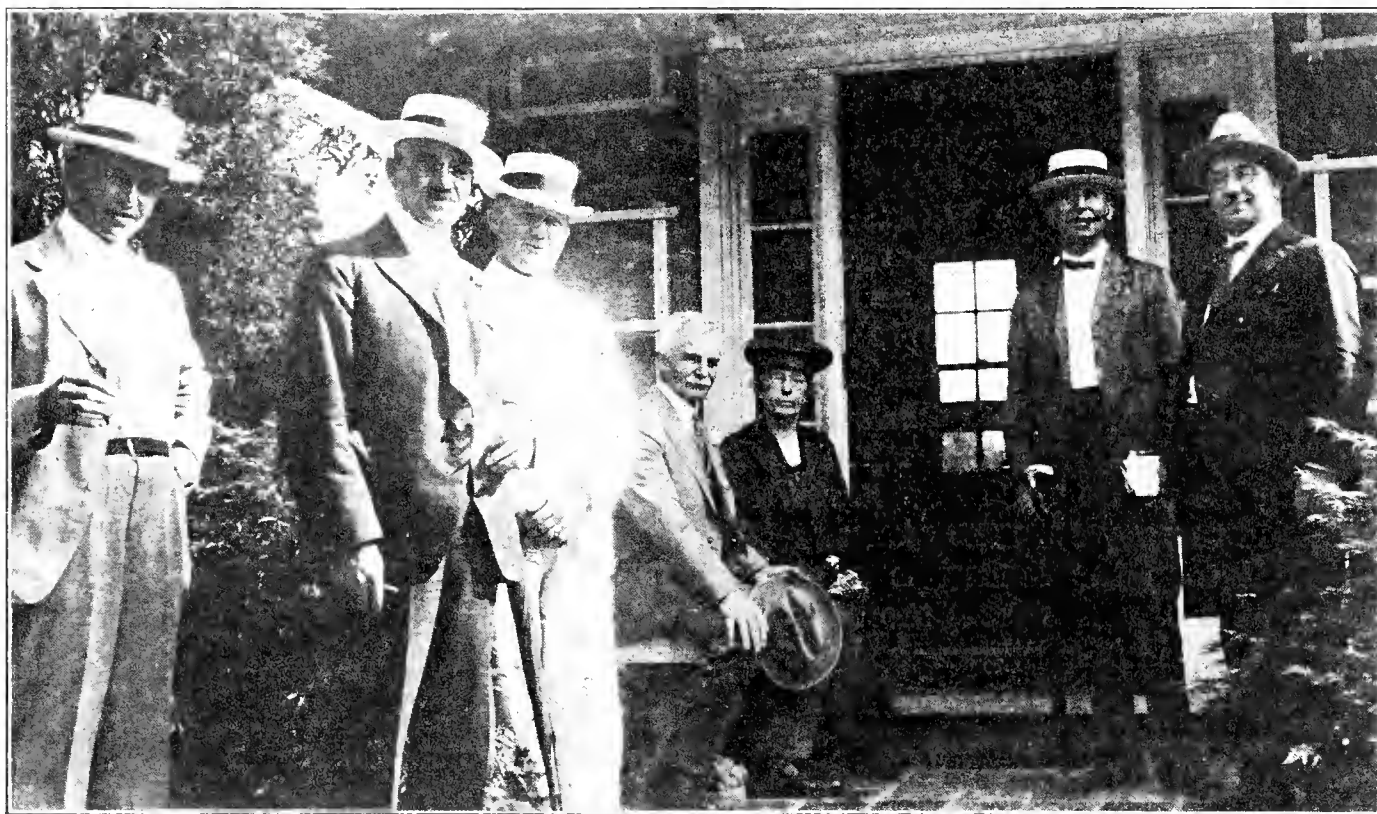
After an inspection of the Nurseries of Mr. Wohlert, the party was taken in charge by Mr. Adolf Muller, proprietor of the DeKalb Nurseries of Norristown, Pa., who had motored over to Narberth in his ever faithful and willing "Henry" for the express purpose of acting as pilot for the balance of the trip. "Some pilot believe me, you can't lose him."

Before starting on the trip, some one suggested that a

their automobiles and with chief pilot Muller at the helm started for the historical grounds of Valley Forge. During the journey to Valley Forge the party inspected a few of the private estates for which that section of the country is noted. Arriving at Valley Forge the party were shown every point of interest worth seeing, and the Western folks were loathe to leave.

From Valley Forge the next point of interest was the DeKalb Nurseries, which were reached at high noon. After a thorough inspection of the same, someone suggested "Eats." That part of the trip had been well taken care of by pilot Muller, who had made all arrangements for dinner at the William Penn Inn, at Gwynedd, Pa. Oh my, "some dinner."

Immediately after dinner the trip was resumed and



Adolph Muller, Charles P. Greening, A. E. Wohlert, Mr. and Mrs. Sherman, J. R. Mayhew, B. J. Greening.

photograph of the party be taken, and the same is reproduced herewith for the benefit of those nurserymen not invited to take the trip. Our only regret is the fact that one of the party is missing from the picture—the man that pulled the trigger of the camera—who by the way was none other than Mr. M. R. Cashman, Vice President of the Clinton Falls Nursery Company, Owatonna, Minn.

The identity of those appearing in the picture reading from left to right are, Mr. Adolf Muller, DeKalb Nurseries, Norristown, Pa., Mr. Charles E. Greening, President of the Greening Nursery Co., Monroe, Michigan, Mr. A. E. Wohlert, Garden Nurseries, Narberth, Pa., Mr. and Mrs. Sherman, the Sherman Nursery Co., Charles City, Iowa, Mr. Mayhew, Waxahachie, Texas, and Mr. Benj. J. Greening, Vice President the Greening Nursery Co., Monroe, Mich.

With the photograph disposed of the party entered

the party headed for the Andorra Nurseries, and after a careful inspection of the extensive nursery, the genial proprietor, Mr. William Warner Harper, entertained the party at his home grounds.

The journey was continued on to Jenkintown, Pa., where a stop was made to inspect the beautiful estate of Mr. John Gribbel. Then on down to Elkins Park, at which place is located the palatial and magnificent home and estate of Mr. P. A. B. Widener, the inspection of which was thoroughly enjoyed and appreciated by everybody.

At 9.30 p. m. after having put in a fifteen hour day sight-seeing, the trip was voted a great success, and the only regret was that the time went too quickly. Our Western guests declared the Philadelphia Convention the best ever.

Notes from the Arnold Arboretum

DEUTZIAS. If all the species and hybrids of Deutzias are considered this genus is not a great success in this region where many of the plants are not hardy and others only flourish in exceptionally sheltered and favorable condition. As is usually the case, the Deutzias in the Shrub Collection suffered last winter, and although none of the plants were actually killed, with few exceptions they have been killed back to the ground, or nearly to the ground, and will not flower. In the large supplementary collection in a bed among the Hickories, on a path leading from Hickory Path, the plants are in unusually good condition now, however, and many of them

Lemoinei. It is a large shrub sometimes five or six feet high and broad which covers itself with large broad clusters of pure white flowers. Handsome and more compact forms of this hybrid are varieties *compacta*, *Boule de Neige*, *Avalanche*, and *Candelabre*. These are now all in bloom, and in this group *Boule de Neige* is perhaps the most beautiful.

Some of the varieties of another of the Lemoine hybrids called *D. rosea* are flowering well this year and promise to be good garden plants in sheltered situations. This hybrid was obtained by crossing *D. gracilis* and *D. purpureascens*, sometimes called *D. discolor*, var. *purpure-*



*View showing "Vinita Home" (on left) and Office of the Munson Nurseries (on right)
(The Denison-Dallas Interurban Ry. passes in front of office, of which one trolley pole is visible).*

are in bloom or will bloom during the next month. Much attention has been paid to hybridizing species of this genus, and probably the most generally useful Deutzia for this region is a hybrid between the Japanese *D. gracilis* and the Chinese *D. parviflora*. *D. gracilis* is a dwarf shrub with pure white flowers in erect or spreading racemes. This is an old and popular garden plant better worth growing in the southern and middle states, however, than it is in Massachusetts where the ends of the branches are often more or less killed. *Deutzia parviflora* is a large, vigorous and hardy shrub with flowers in compact, many-flowered corymbs. It is a native of northern China and Mongolia. The hybrid between these two species was made by the French hybridizer Lemoine many years ago and has been called *D.*

ascens. This plant has petals which are purple on the outer surface, and is usually not hardy here. *D. rosea* and its varieties have flowers more or less tinged with purple. Those now in bloom are var. *eximia*, var. *floribunda*, and var. *campanulata*, the latter with nearly white flowers. *Deutzia myriantha* is another hybrid obtained by crossing *D. Lemoinei* and *D. purpureascens*. This has white flowers and is not yet in bloom, but two of its varieties, var. *Boule Rose* and var. *Fleur de Pommier* are now flowering and are handsome and apparently hardy plants with flowers tinged with rose.

DEUTZIA SCABRA. This native of Japan and China is one of the hardiest and most generally cultivated of all the Deutzias. It is a tall shrub with reddish branches, very rough leaves and erect clusters of white flowers

sometimes flushed with rose, which will not open for two or three weeks. This is the *Deutzia* of old gardens north and south. The variety *crenata* has brown branches and less rough leaves, and although less common in gardens appears to be equally hardy. The variety *Watereri* has flowers tinged with red on the outer surface of the petals. Variety *plena* has double flowers with petals tinged with rose color. The variety *Pride of Rochester* has large flowers tinged with rose and is one of the handsomest of this group. The var. *candidissima* (*D. Wellsii* of some gardens and the *D. alba plena* of others) has pure white double flowers.

DEUTZIA REFLEXA and *D. GLOBOSA* are natives of western China and did not suffer last winter. They are now covered with flower-buds, but it is too soon to speak with certainty of their value in this climate.

DEUTZIA LONGIFOLIA is a tall shrub with erect branches, lance-shaped leaves, and clusters of large flowers. This native of western China is probably one of the handsomest of the Chinese species, but, although it is not killed here by cold, the branches are always badly injured and the flower-buds are also injured.

DEUTZIA GRANDIFLORA is one of the most distinct species of the genus and the first to bloom. The flowers open with the unfolding of the leaves, and are in from one- to three-flowered clusters with white petals three-quarters of an inch long. This plant, which is exceedingly rare in cultivation, is a native of northern China and can be seen with the other Chinese shrubs on Bussey Hill.

DEUTZIA HYPOGLAUCA is a distinct and hardy new species from northern China and is a tall shrub with erect stems and clusters of white flowers, which promises to be a good garden plant in this climate.

DEUTZIA VILMORINAE from central China is hardy in sheltered positions and is also a tall shrub with gracefully spreading stems, loose clusters of white flowers and lance-shaped, pointed leaves covered with stellate clusters of hairs. By crossing this species with *D. scabra* a hardy and handsome hybrid has been obtained to which the name *D. magnifica* has been given.

DEUTZIA DISCOLOR is another fairly hardy species from central China with hemispherical clusters of white flowers which are three-quarters of an inch indiameter. The variety *major* of this species has rather larger flowers and is a larger and apparently a more vigorous plant. It can be seen with other Chinese species on the southern slope of Bussey Hill.

DEUTZIA KALMIAEFLORA. *Deutzia purpurascens* is not hardy but by crossing it with *D. parviflora* a hardy or nearly hardy plant has been obtained to which the name of *D. kalmiaeflora* has been given. This hybrid has carmine-colored flowers about three-quarters of an inch in diameter, in small compact clusters. When it does well this is one of the handsomest of the hybrid *Deutzias*.

DEUTZIA SIEBOLDIANA is a dwarf Japanese species with small white flowers and much less valuable as a garden plant than many of the other species. A hybrid (*D. candelabrum*) obtained by crossing it with *D. gracilis* is a handsome plant with gracefully drooping branches which are covered with elongated clusters of white flowers.

Trials of a Kansas Nurseryman

That the life of a Kansas Nurseryman is not all that it is sometimes cracked up to be, is clearly demonstrated by the following letter recently received by the National Nurseryman from "Berl" Taylor, just prior to the Philadelphia Convention, at which time he feared he would be unable to leave home on account of the late season.

Dear Sir:—

I very much fear that I will be unable to attend the Convention this year, as we are somewhat behind with our cultivating and I find that if we ever get caught up with the work after having nothing but rain and cold weather all spring the only thing for the writer to do is to get out and hustle some himself. We certainly have had a very strenuous time this spring. When the rains finally let up so we could get into the field it was almost impossible to hire extra teams as all the farmers were in the same fix that we were.

Just as the ground got into shape to work after two or three weeks of rain we were unfortunate enough to have our barn here, at Topeka, with all its contents destroyed by fire. We lost every horse we had at this place and it took us another week to get equipped for business again.

The writer got it in his head that it was up to him to help to keep the nation from starving this year and therefore planted some two hundred acres more corn than usual and several hundred bushels of potatoes.

The folks are getting used to seeing cultivators, wagons and such like hitched on behind the "Cadillacs" traveling down the country road at the rate of forty miles an hour. By the way, the last time I saw you I think you were driving a "Cadillac" yourself, and I am wondering whether you have found out what a handy machine it is for hauling loads of trees, men, etc. Last fall we were short of men at Silver Lake and I put a trailer on behind the Cadillac and had some fifteen or twenty men at Silver Lake by 7 o'clock in the morning, then unhitched the trailer and hitched on to the loads of trees and pulled them to the station a mile and a half distant. In fact I loaded many cars of trees simply by pulling loads behind the "Cadillacs." We were short on teams and something had to be done. I remember pulling one load of apple seedlings weighing nine thousand pounds and this from the end of the wagon tongue. You can rest assured that there was not much exposure of the stock from the time it left the field until we got to the car. We would make the trip to the car in ten minutes or less and make it back in five. It is a little hard to stop as soon as you want to, especially when the wagon load of trees upsets. I usually keep a man on the load to give the danger signal when there is any danger of upsetting. One day when we were a little late in finishing loading a car and were hitting up a little livelier trip than usual with the last load of trees the writer did not get the danger signal to slow down and when he finally did do so the load of trees was upset, all the standards broken off the wagon, the wagon turned over with the trees and some distance down the road. When we got back to the

pile of trees all we could see of the man was his head sticking out from among the bundles of apple trees. Fortunately he was thrown on a grassy bank at the side of the road and uninjured, but it took quite a little digging to get him out.

I do want to go to Philadelphia if possible. We had an opportunity a few days ago to make the trip overland in a brand new auto. A neighbor of ours is going to go back to spend two weeks at his old home near Philadelphia and just insisted that wife and I accompany him. They promised to start in time to reach Philadelphia by the 27th. We turned down the invitation, however, on account of lack of time. I feel now that if the writer gets to go by train he will be very fortunate.

Yours truly,

L. R. TAYLOR & SONS,

by E. R. TAYLOR.

A CORRECTION

J. W. Hill, Des Moines, Iowa, was elected Treasurer of the American Association of Nurserymen, instead of Peter Youngers, Geneva, Nebraska, as given in our former issue.

The Board of United States Appraisers reversed the decision of the Collector of the Port of Philadelphia. Last spring Andorra Nurseries imported a quantity of *Taxus cuspidata* seedlings. They were assessed 15% ad valorem as per Tariff Act 1913, which provides for all trees, shrubs, plants and vines commonly known as nursery or greenhouse plants not specially provided for in this section. Andorra Nurseries claimed them to be free of duty, under that paragraph of the act which especially permits coniferous evergreen seedlings shall be entered free. The Collector of the Port decided they were not coniferous evergreen seedlings, as the matured trees did not bear cones. The United States Board of Appraisers reversed this decision, allowing them to come in free because it was proved that the genus *Taxus* was classified botanically as a coniferous plant.

The Executive Committee of the American Association of Nurserymen, at a meeting following the Philadelphia Convention

Elected Mr. Curtis Nye Smith, of Boston, Mass., Secretary and Counsel of the Association for the following year.

Appointed Mr. Wm. Warner Harper as the representative of the Association to confer with Mr. Herbert Hoover in regard to the plan how the nurserymen may assist in food production.

Selected Chicago for the next annual convention on June 26—28, 1918.

July 17, 1917.

CURTIS NYE SMITH, *Secretary*.

We should have been more explicit in our account of the presentation of a bouquet of roses to Mr. and Mrs. Thomas B. Meehan at the convention dinner held in Philadelphia. The presentation was made by the Women of the American Association at an impromptu meeting preceding the dinner, it being the twenty-ninth anniversary of their wedding.

WAR BULLETIN

Our own Harlan P. Kelsey under fire! Detailed Reports by Creel & Kelsey anxiously awaited!

Louisville, Ky., July 24. A sentry guarding the cantonment discharged his rifle at the parade of the Belgian War Mission here to-day when the car leading the procession refused to heed his command to halt. The rifleman fired above the heads of the car's occupants. He was arrested.

The mission was about to enter the camp under the guidance of H. P. Kelsey, who was in the first car directly in front of Baron Moncheur.

Kelsey, a civilian, planned the camp. When the order to halt was received he directed the chauffeur to ignore it. The sentry promptly fired and the car stopped. A military officer from the camp who was in the second car with Gen. Leclercq ordered the sentryman relieved from duty.

Military men in charge of the party declared the enlisted man was justified.

At the closing session of "The Women of the American Association of Nurserymen" held at the Hotel Adelphia, Friday, June 29th, 1917, the following resolution was unanimously adopted.

"We the Women of the American Association of Nurserymen, in session in Philadelphia, wish to express our appreciation of the courtesies extended to us, which have made our second meeting of such pleasure to all.

FIRST. To the American Association of Nurserymen, who made possible this meeting.

SECOND. To Mr. and Mrs. Meehan for formulating the plans for our entertainment during our stay.

THIRD. To Mr. Ernest Hemming, Editor, and Mr. Penrose Robinson, Assistant Manager of the National Nurseryman, whose guests we were on a trip to Willow Grove Park.

FOURTH. To the Philadelphia Chamber of Commerce and Mr. Hicks, Secretary of the Convention Bureau, for their kindness in arranging and personally conducting trips to numerous historic points of interest in the City."

It was further resolved that a copy of these resolutions be sent to Mr. and Mrs. Meehan, Mr. Ernest Hemming, Mr. Penrose Robinson and to Mr. Ernest T. Trigg, President of the Philadelphia Chamber of Commerce, and to Mr. Curtis Nye Smith, Secretary of the American Association of Nurserymen.

ROSA D. MEEDAN, *Acting Secretary*.

Andorra Nurseries, Chestnut Hill, Phila., Pa.,

June 5, 1917.

Dear Sirs:—

In reply to yours of June 1st, you may renew our subscription for one year, for which we enclose subscription price. This trade journal is a necessity and not a luxury.

Yours very truly,

WM. WARNER HARPER, *Proprietor*.

The National Nurseryman

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AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

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Foreign Subscriptions, in advance	\$2.00
Six Months	\$1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements. Drafts on New York or postal orders, instead of checks, are requested by the Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be addressed, Editor, Flourtown, Pa., and should be mailed to arrive not later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., August 1917

Two years ago a radical change took place in the American Association of Nurserymen, amounting to a reorganization. When habits of thought and action of large bodies of men have to be diverted into new channels, it cannot be expected that much can be accomplished in a very short time. The past two conventions, under the new organization, have shown the nurserymen to be in sympathy with the leaders, as never was interest so energetic and active, but speeches, resolutions and discussion never did accomplish much, unless they were backed by real work. The old organization owed its efficiency to unselfish individuals, who gave their time and money freely, and the success of the new organization will largely depend upon this, or some equivalent. As the new organization is being largely modelled along the lines of a business corporation, it will depend for its success upon the activity and untiring efforts of its officers, backed up by the body of the Association, and to really accomplish things such as have been proposed, good business practice will have to be followed.

At the Philadelphia convention there was an all too-evident lack of time to give proper consideration to matters vital to the welfare of the Association. It would be difficult to find a more able president than John Watson, yet in spite of his efforts sessions were not started on time and committeemen were working until the wee sma' hours of the morning.

This is largely due to the fact that it is still working under the old-fashioned programme. The first sessions were largely taken up with matters of small value compared with important work that was crowded into the last session.

Resolutions of grave import were rushed through and adopted and when it was recognized that proper consideration had not been given, they were brought up again for revision. There are some things that must neces-

sarily be left until the last, but there are others that took up a good part of the early sessions that could just as well have been side-tracked.

There is evident need for an efficiency and cost expert to systematize the operation of the convention, so as to get the greatest good for the expense entailed.

We may as well look upon a convention as a business proposition and consider the cost. If one were able to get at the aggregate cost to each and every nurseryman, coming as they do from all parts of the state, then add to that the loss to their business, due to their absence, it would make a large total.

Such expense does not show on the books of the Association, yet it can properly be charged against it, unless it be classed under the head of vacation.

Even if such overhead expenses be entirely ignored, common business sense requires that maximum results be secured.

It has been truthfully said "A committee is a body of men that accomplishes as much as one man in a longer time" and as the work has to be done largely by committees, every possible effort to conserve time and accomplish important things during the sessions should be made.

As the nurserymen forming the Association only meet in convention once a year, it should at least be made so that the most could be accomplished at that time.

Even if the Executive Committee be given plenary powers, they would work with much more heart if the voice of the Association was emphatic on a given subject and to make it so the issues must be clean cut and deliberately considered in convention assembled.

The New York Sun of July the 8th in reporting the Convention of the American Association of Nurserymen reported at length on the suggestion made by President Watson that there should be a National Arboretum, one which should be entirely free from the clutches of the politicians. The Sun further remarks "If the Nurserymen's Association will father this the editor of the Farm and Garden Department of the Sun will agree to obtain all the land that is needed for the purpose without costing the Association a penny. The upkeep can be met by annual dues and bequests."

According to The Australian International Nurseryman a conference of experts has been held to discuss a disease that has been attacking the Plane trees (*Platanus Orientalis*) in various parts of the State of Victoria. The scientific name of the disease is *Gloeosporium nervisequum* and is causing much anxiety. The Plane tree is very largely used as a street and avenue tree in this part of the world.

Among other resolutions, such as those recommending that all trees be heavily pruned early in the winter and that all the affected shoots and branches be burned forthwith, leaves to be collected and burned soon after falling, and sprayed with Bordeaux Mixture during the winter and again when growth begins, a resolution was to the effect that in future the Plane tree should only be planted

in soils and situations that are favorable to its healthy development.

In dealing with fungous and other diseases of plants this is a phase of the subject that should receive more consideration than it gets. Every plant has its own special requirements of soil, climatic conditions and temperature most favorable to its development, but when it is grown under uncongenial conditions it can hardly be expected to be resistant to fungous disease and insect pests.

Obituary.

PHILIPPE DE VILMORIN

It is with very great sorrow that we have to record the unexpected death of the head of the world renowned French seed house of Vilmorin-Andrieux and Co. of Paris, which occurred on June 30.

A cable announcing the death of Philippe de Vilmorin was received by the American representatives of the firm in New York on Tuesday, July third. The Exchange had no further particulars as to the cause of his death. Mr. de Vilmorin had taken a most active part in military operations since the outbreak of the war in July, 1914, first as an organizer and interpreter on behalf of the French army in England, and afterwards in an organizing capacity in his own country. We believe he took no active part in trench warfare, but had received high honors from the French Government.

Mr. de Vilmorin inherited the graces and linguistic skill of his father, Henri de Vilmorin, who also died at about the same age as his son, the subject of present notice, who cannot have been more than 47 or 48 years of age. Tall, dark, handsome, of the best French type, Philippe de Vilmorin was a brilliant gentleman, scholarly, artistic and notable conversationalist and very humorous. He was known at all the larger European horticultural exhibitions, and was a central figure in the horticulture and floriculture of the Continent. He maintained the reputation of his firm of which he has been head for 48 years since his father's death in 1899, at the very highest, and his loss will be very keenly felt by the house of which he was president.

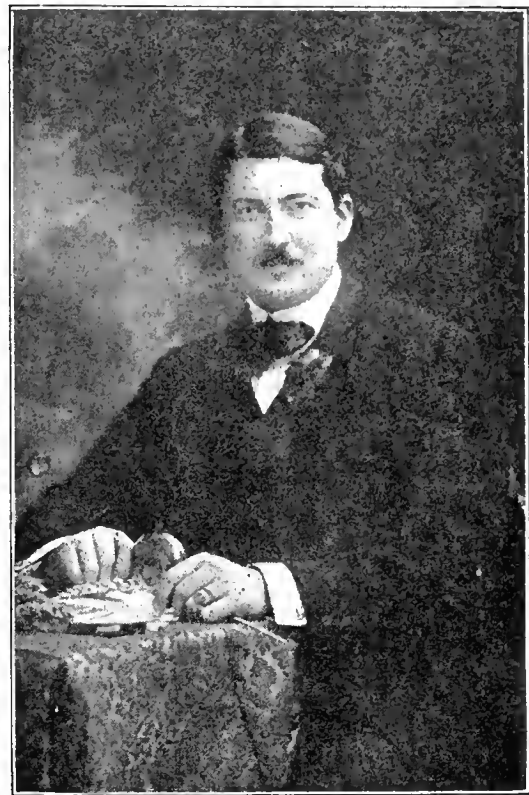
The deceased visited America in 1893 with his father, who read a paper before the horticultural congress of the World's Fair at Chicago.

He leaves a widow and several children to whom the sympathy of the whole American horticultural trades will be extended.

Philippe le Veque de Vilmorin, one of the most conspicuous figures in European genetics, died on June 30 at the age of forty-five, according to a cablegram received by President David Fairchild of the American Genetic Association. A reserve officer in the French Army, he had been attached to the Anglo-Indian Army in France as an interpreter, but no particulars of his death are given.

Although identified with plant-breeding, M. de Vil-

morin also carried on dog-breeding experiments for many years. His closest scientific affiliations were with William Bateson of England, whom he regarded as his mentor, and J. P. Lohs, the Dutch botanist. He was secretary of the last International Conference on Genetics, and a life member of the American Genetic Association. He had made numerous trips to America, had many friends here, and published a report for the French Government on agriculture at the St. Louis Exposition. His published work is considerable in size and value, but his



*The Late Philippe de Vilmorin
By Courtesy of the "Florists Exchange"*

greatest contribution to genetics was, perhaps, his personal influence, which can only be understood by the help of a knowledge of his family history.

As early as 1727 there was in Paris a seed store "*Au coque de la bonne foy*," kept by Pierre Geoffroy, whose daughter and heiress married Pierre d'Andrieux, a botanist. Their daughter in turn married, in 1774, Philippe-Victoire-Leveque de Vilmorin, a young botanist belonging to a Lorraine family which was identified with war and agriculture. Thus was founded the business still known as Vilmorin-Andrieux and Company, one of the most celebrated seed-growing and seed-selling establishments in the world.

TREE CULTURE IN URUGUAY

The Uruguayan Government seeks to encourage tree planting, and the National Nursery at Toledo has supplied trees at a very low cost. In compliance with a recent decree, the nursery will in the future donate large numbers of trees. The decree provides that proprietors possessing up to 100 hectares (247 acres) of land will be supplied gratuitously with 100 trees and that the nursery can distribute 200,000 trees every year in this way. The nursery will also donate in 1917 100,000 and in the following years 200,000 trees to rural municipalities, schools, police farms, and other institutions. — *Daily Commerce Reports*.

The Munson Nurseries, Denison, Texas

The Munson Nurseries were established in 1876 by the late T. V. Munson on a 45-acre tract of land on the north side of Denison, Texas. By 1887 this tract became too small for further conduct of the nurseries and the site was moved to a 120-acre tract 3 miles to the south of Denison, and where in the same year "Vinita Home" was erected. In 1895 the eldest son, William Bell Munson, was taken into the business, having previously spent his boyhood days working with his father in the Nur-

of the imported or exotic varieties did not succeed in the Southwest, and it was not until the introduction of these native originations that fruit growing really became a success in this region.

These nurseries grow a general line of the standard fruits such as apple, peach, pear, plum, cherry, apricot, grapes, berries, and the hardy ornamentals, shades, evergreens, roses, and other hardy adapted trees, shrubs, and vines. They do not grow for wholesale as much as they



View in the Munson Nurseries

Showing by comparison the growth of four kinds of hedges, viz:—on left of drive—Amoor River Privet. On right of drive—California Privet. At fork of drive in center—Euonymus Japonica. In rear—Japan Privet. Large tree in rear—American Elm.

sery. In 1913 the founder of the nurseries died, and William B. Munson succeeded to the management, carrying out the policy and ideals of his father.

These nurseries have been made famous by the introductions of many new varieties of fruits, the originators of the late T. V. Munson. Principally among these are many varieties of grapes as well as peaches, plums and persimmons. Many of these have become recognized standards for the Southwest, for prior to that time many do for their retail trade which has been personally

worked up thru a reliable catalog which is published annually.

There is one historical fact connected with these nurseries, and of which the State of Texas is proud, and that is it was thru them that the great grape industry of France was saved from threatened ruin and virtually re-established.

During the 1880's the phylloxera had almost ruined many of the vineyards of France and it threatened to wipe out that industry, unless some means were found

to check it. As the roots of their native grapes did not resist this insect, it was reasoned that if the *Phyloxera* came from America, and many of their native species there thrived, that such species must be immune or fully resistant to the attacks of the *Phyloxera*. So then if they could get some good congenial species that resisted the *Phyloxera*, they saw where the vineyards might be saved and hence the saving of their greatest industries. With this thought in mind the French Government commissioned one of the greatest viticulturists to come to the country and act with an authority commissioned by the United States Government, to investigate and search out such species. So our Government commissioned the late T. V. Munson as a special authority, and in company with the late F. Lawson Scribner, then the Pathologist of the Department of Agriculture they escorted Prof. Pierre Viala in the different sections of the country. Their search was rewarded by the finding of two species of grapes, the *Vitis Champini*, and *Vitis Berlandieri*, growing on the chalky soils in Bell County, Texas, soil similar to that in Southeast France where they wanted to re-establish the vineyards. After many tests these two species were found to be successful. So then for several years the Munson Nurseries were engaged in the propagating and sending to France the vines, cuttings and seeds of these two species.

From this start, other species and hybrids were found or originated that served as resistant stocks on which the fine varieties of France were grafted. In recognition of this valuable work the French Government honored Prof. Scribner and Prof. T. V. Munson with the "Legion of Honor" and "Chevilier du Merite Agricole" in the year 1889.

TO THE NURSERYMEN OF AMERICA

By F. A. Kuhn

The efforts being made to increase the food supply should not be overlooked by the nurseryman. Fruit is a very important food and science tells us that it is on par with meat and cereal. It is therefore for the benefit

of all concerned that the nurserymen start a campaign to induce farmers to plant a few fruit trees on some of their waste land. Land containing second growth boulders, stumps and swampy conditions can be cleared and used for the planting of fruit trees. Such land after being cleared and trees planted thereon, will still give the farmer land to grow cultivated crops between the trees.

By planting crops between the trees on such land not only helps the trees but a good crop can be harvested. It is important that only cultivated crops should be planted. When one realizes with what ease such lands can be put into condition by the use of dynamite, it seems impossible that so much waste land lies idle.

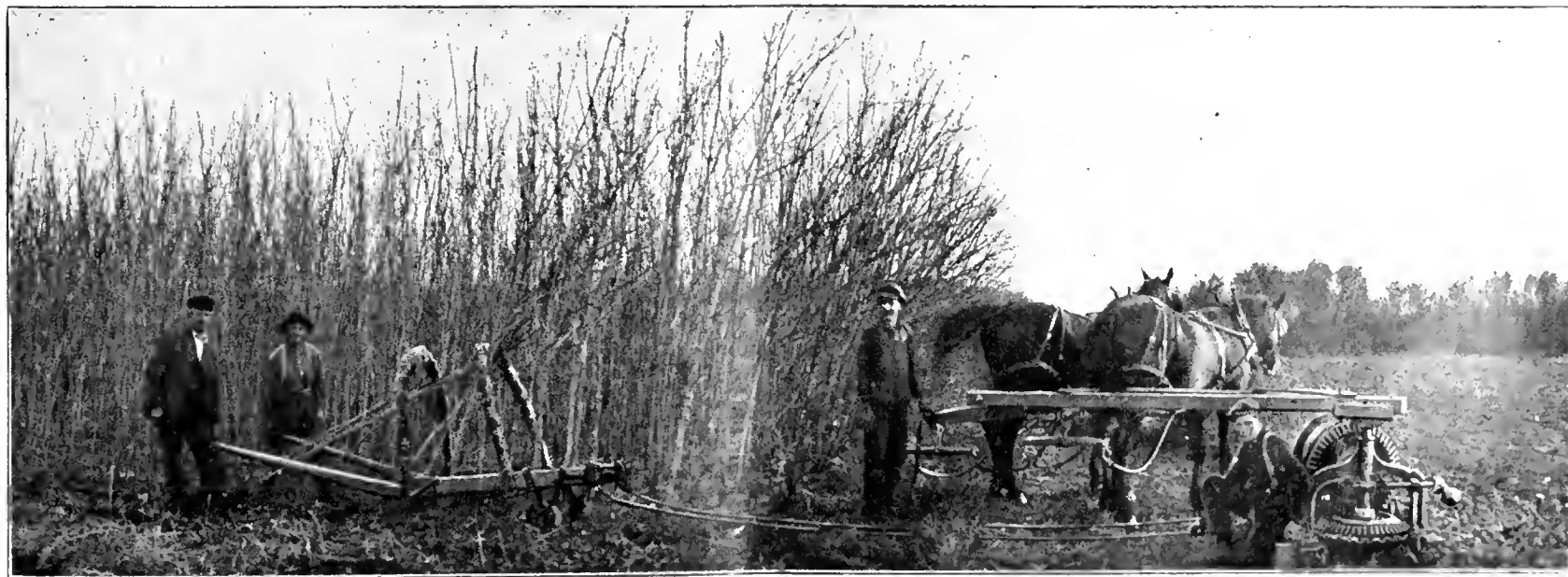
The writer was instrumental in clearing twenty acres of second growth and stumps, with the use of 40% dynamite. Grapes were planted on the land and the first year after planting potatoes were planted between the rows. The returns from the potato crop more than repaid the owner for clearing the land. This is only one instance where profits can be obtained off cleared lands and is merely recited to show the possibility of using such lands at a profit.

We only need think of the increased demand for fruit this country will have to meet, now and after the war is over to comprehend how important it is that we get busy. Many orchards have been destroyed in Europe and it will take many years to replace them.

The American farmer will receive the benefit if he plants fruit now, and a campaign directed along these lines has every reason to be met with success if rightly made.

A. R. Wheelock has taken over the business of Wheelock and Congdon, North Collins, New York, (formerly Willett and Wheelock).

Specializing in grape vines and small fruits, this firm has a very fine stock and grade up to the highest standard.



Two horses will do the same work with this digger as twelve horses do with those now in use. Write for descriptive circular with testimonials.

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See the

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FOREST TREE SEEDLINGS and ORNAMENTAL SHRUBS

We are growing and offering for sale for fall 1917- and Spring 1918, a limited quantity of Forest Tree seedlings such as Box Elder, Red Bud, Maples, Hackberry, American Sweet Chestnuts, 2 year olds, Green Ash, Tulip Poplar, Sycamore, Locusts, Walnuts, Etc.

Shrubs, Althea in varieties, Berberry, Deutzias, Forsythias, California Privet, 1 and 2 years old, Also Amoor River, Ibota, and Polish Privets, Spireas in varieties, Weigelas, etc., Trade list will be mailed in August.

Write for quotations.

FOREST NURSERY COMPANY

McMinnville,

Tennessee

THE CHASE LABELS

For Nurserymen and Florists are Excelled by None

Plain, Painted, Wired with Tinned or Copper Wire and

PRINTED IN ANY MANNER that may be called for

Prices as low as First-Class Work and Unequalled Promptness in

Delivery will justify.

THE BENJAMIN CHASE CO.

P. O. Address, DERRY VILLAGE, N. H.

Western Union Telegraph, DERRY, N. H.

We are now Ready to Book Orders for Harrison Grown Trees

FOR EARLY FALL DELIVERY

If you do not find what you are looking for in the list below, write or telegraph us and we will be glad to send complete list of our offerings.

PEACH—1-year Budded

1 in. up 7-8 ft.	¾ in. 6-7 ft.	9-16 in. 5-6 ft.	½ in. 4-5 ft.	7-16 in. 3-4 ft.	5-16 in. 2-3 ft.
300 Alexander,			8,000 Krummeil,		
200 Alton,			3,000 Late Crawford,		
5,000 Beer Smock,			1,000 Lemon Free,		
40,000 Belle of Georgia,			400 Levy's Late,		
2,000 Bilyer's October,			250 Lorentz,		
2,500 Brackett,			1,500 Mamie Ross,		
20,000 Carman,			1,750 Matthew's Beauty,		
1,500 Chair's Choice,			3,000 Mayflower,		
12,000 Champion,			300 McCallister,		
300 Denton,			800 Miss Lola,		
200 Dewey, (Ad. Dewey)			250 Moore's Favorite,		
2,000 Early Crawford,			2,000 Mountain Rose,		
200 Early Elberta,			800 New Prolific,		
500 Easton Cling,			1,500 Niagara		
1,200 Ede, (Capt. Ede)			2,000 Old Mixon Free,		
2,000 Edgmont Beauty,			12,500 Ray,		
60,000 Elberta,			2,000 Red Bird Cling,		
2,000 Engle's Mammoth			1,500 Reeves's Favorite,		
2,000 Fitzgerald,			2,000 Ringgold (Wilkin's		
2,000 Ford's Late White,			Cling)		
1,500 Foster,			3,500 St. John, (Yellow)		
5,000 Fox Seedling,			7,000 Salway,		
3,000 Francis,			5,000 Slappey,		
2,000 Geary's Hold-On,			2,000 Steven's Rare Ripe,		
10,000 Greensboro,			1,000 Stump		
2,000 Harrison Cling,			1,500 Uneeda or Gordon		
3,000 Heath, (White H.			1,200 Waddell		
Cling)			1,200 Walker		
10,000 Hiley, (Early Belle)			200 Weaver,		
5,000 Iron Mountain,			1,000 Willett,		
2,000 Kalamazoo,			1,000 Wonderful,		

APPLE—1-year Budded

5-8 in.	½ in.	3-8 in.	5-6 ft.	4-5 ft.	3-4 ft.
200 Alexander,			100 Cpalescent,		
2,000 Baldwin,			1,000 Paragon, (M. B.		
2,000 Ben Davis,			Twig)		
200 Bonum,			500 Rambo, (Summer)		
300 Bullock, (A. G.			400 Rambo, (Winter)		
Russett)			1,000 Red Astrachan,		
100 Chenango,			100 Red June, (Car. Red)		
12,500 Delicious,			2,000 R. I. Greening,		
1,000 Early Harvest,			2,000 Rome Beauty,		
300 Faliawater,			600 Smokehouse,		
2,000 Fameuse,			200 Spitzenburg,		
1,000 Gano,			400 Stark,		
3,000 Gravenstein,			2,000 Starr,		
7,000 Grimes' Golden,			15,000 Stayman's Wine Sap,		
200 Hubbardston,			400 Sweet Bough,		
500 Hyslop,			700 Thompkins King,		
3,500 Jonathan,			500 Transcendent,		
200 July, (Fourth of July)			700 Wagner,		
200 Lowry,			5,000 Wealthy,		
400 Maiden's Blush,			10,000 William's Early Red,		
8,000 McIntosh,			3,500 Winter Banana,		
300 Nero,			3,500 Winesap		
2,000 Northern Spy,			100 Winter Paradise,		
1,500 Northwestern,			500 Wolf River,		
(N. W. Greening)			500 Yellow Newtown,		
3,500 Oldenburg, (Duchess			8,000 Yellow Transparent,		
of Oldenburg)			1,200 York Imperial		

APPLE—2-year Budded

3-4 in.	5-8 in.	½ in.	6-7 ft.	5-6 ft.	4-5 ft.
1,000 Ben Davis,			1,000 Northern Spy,		
2,000 Delicious,			1,000 Stark,		
1,000 Fameuse,			1,000 Wealthy,		
4,000 McIntosh,			2,000 Wm. Ely. Red,		
2,000 Paragon, (M. B.			Twig)		
8,000 R. I. Greening,			1,000 Wolf River,		
1,000 Gano,			1,000 Winter Banana,		
			2,000 Yellow Transparent,		

PEARS—Two Year Budded

3-4 in.	5-8 in.	½ in.	6-7 ft.	5-6 ft.	4-5 ft.
6,000 Bartlett,			500 Clapp's Favorite,		
2,000 Seckel,			500 Garber,		
500 Lawrence,			500 LeConte,		
500 Anjou,					

KEIFFER PEARS—Two Year Budded

3-4 in.	5-8 in.	1-2 in.	6-7 ft.	5-6 ft.	4-5 ft.
			9,000 Keiffer		

CALIFORNIA PRIVET SPRUCE, KOSTER'S BLUE

		Specimen Plants
25,000 6 to 12 in.		100 1½ to 2 ft.
25,000 12 to 18 in.		100 2 to 2½ ft.
25,000 18 to 24 in.		100 2½ to 3 ft.
35,000 2 to 3 ft.		100 3 to 3½ ft.
5,000 3 to 4 ft.		100 3½ to 4 ft.
(Specimens)		100 4 to 4½ ft.
2,000 3 ft. high, 3 ft. broad		100 4½ to 5 ft.
BARBERRY, THUNBERGII		100 5 to 5½ ft.
20,000 6 to 12 in.		100 5½ to 6 ft.
20,000 12 to 18 in.		25 6 to 7 ft.
10,000 18 to 24 in.		25 7 to 8 ft.
5,000 2 to 3 ft.		
1,000 2½ to 3 ft.		

SPRUCE, NORWAY

1,000 2½ to 3 ft.
2,000 3 to 3½ ft.
2,000 3½ to 4 ft.
1,500 4 to 4½ ft.
1,500 4½ to 5 ft.
1,000 5 to 6 ft.
500 6 ft.
300 7 ft.
100 8 ft.
100 10 ft.

MAPLE, NORWAY

SPRUCE, COLORADO BLUE	5,000 7 to 8 ft., 1 in.
Selected Blues—compact	10,000 8 to 10 ft., 1¼ to 1½ in.
50 2 to 2½ ft.	15,000 10 to 12 ft., 1½ to 1¾ in.
75 2½ to 3 ft.	15,000 12 to 14 ft., 1¾ to 2 in.
100 3 to 3½ ft.	10,000 14 to 16 ft., 2 to 2½ in.
100 3½ to 4 ft.	10,000 2½ to 3 in.
100 4 to 4½ ft.	5,000 3 to 3½ in.
100 4½ to 5 ft.	1,000 3½ to 4 in.
75 5 to 5½ ft.	300 4 in.
Spruce, Colorado Green	
50 2 to 2½ ft.	
100 2½ to 3 ft.	
100 3 to 3½ ft.	
100 3½ to 4 ft.	
190 4 to 4½ ft.	
180 4½ to 5 ft.	
60 5 to 5½ ft.	

PLANE, ORIENTAL

2,000 6 to 7 ft.
1,000 7 to 8 ft.
1,000 8 to 10 ft., 1¼ in.
1,000 10 to 12 ft., 1½ in.
1,000 12 to 14 ft., 1¾ in.

WANTED—An experienced man for bookkeeper, one who is familiar with nursery work and is capable of taking charge of our bookkeeping department.

Also an experienced man for propagating small evergreens and shrubbery and who has had experience in greenhouse work.

HARRISONS' NURSERIES,
Berlin, J. G. Harrison & Sons, Maryland



THE NATIONAL NURSERYMAN



SEPTEMBER 1917

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

*Peach, Gooseberries,
Currants, Berberis,
Spirea Van Houtte,
Other Ornamental Shrubs,
H. P. Roses, Etc.*

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.
MONROE, MICH.

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa



Our Specialty

A large and complete line of high quality Nursery Stock
for the wholesale trade.

CARLOTS OF

Apple, Cherry, Peach, Green
Ash (*Fraxinus Lanceolata*), Elm American
White, Maple Silver, Sycamore
American, Shrubs in Assortment

Send for trade list and bulletins. Let us quote your wants.

YOU will undoubtedly agree
that there is a great ad-
vantage in dealing with a firm
who can **ALWAYS** supply
EVERYTHING you need.

Therefore



FELIX & DYKHUIS

WHOLESALE NURSERIES

Boskoop, - - Holland

Ask for Our Beautifully Illustrated Catalogue

You Know Us for Quality

We offer the most complete line
in the East.

Heavy on,

APPLES

CALIFORNIA PRIVET

SPIREA VAN HOUTEI

ROSES

ORNAMENTAL SHRUBS

BERBERRY THUNBERGII

HYDRANGEA P. G.

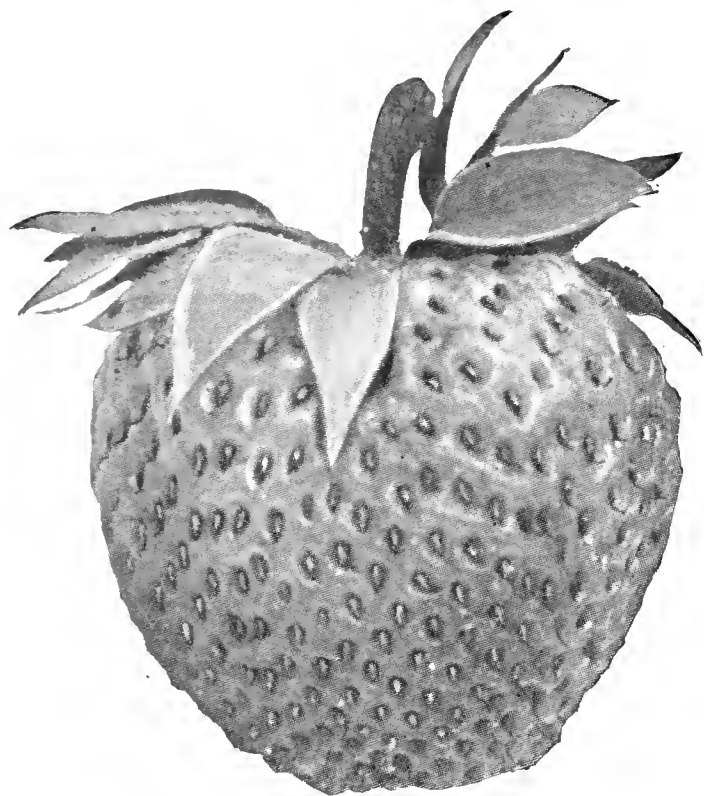
PLANTING STOCK, ETC.

Pleased to price your list of wants.
Shipping service of the very best.



C. R. BURR & CO.

Manchester, : Conn.



Strawberry Plants

FROM NOVEMBER FIRST TO MAY FIRST

We supply leading fruit growers, nurserymen and dealers with fine strawberry plants.

Our plants are healthy, heavily rooted, and guaranteed *true-to-name*.

We grow all the leading standard and everbearing varieties.

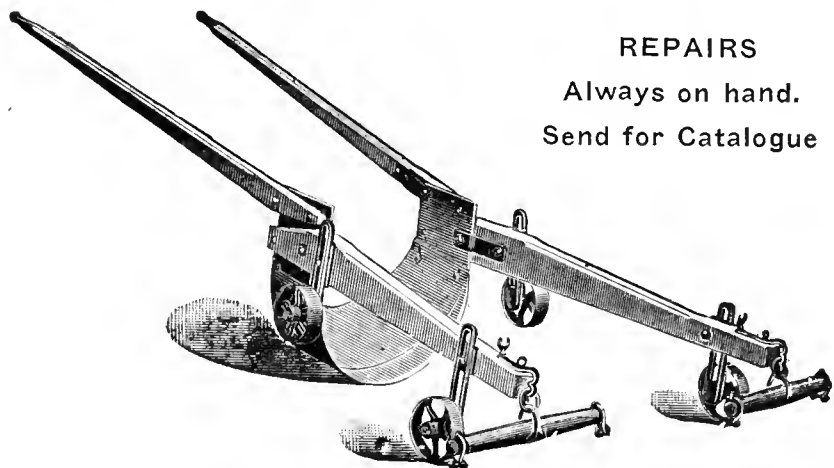
Get in touch with us regarding your supply for next season. Shipments made to you or direct to your customers. Packing unsurpassed.

The W. F. ALLEN CO., 100 Market Street, Salisbury, Maryland

1857

1917

BRAGG'S COMMON SENSE TREE DIGGER



REPAIRS
Always on hand.
Send for Catalogue

Digger gets All the Roots at the rate of Twenty to Forty Thousand trees per day, and only needs same power as plow.

L. G. BRAGG & CO.
KALAMAZOO, MICH.

FRENCH FRUIT STOCKS

Offered for Account of

VINCENT LEBRETONS NURSERIES
Angers, France

December or February shipment from France

Mahalebs, Myrobolans, Mazzards, Apple, Pear, Quince, Manetti and Multiflora Stocks, etc. Also a full line of Ornamentals in lining-out sizes.

Advance prices now ready for Nurserymen.

RAFFIA

RED STAR BRAND, XX Superior, A. A. West Coast, also dyed in various colors. Stock always on hand.

RAFFIA MATS

better than burlap.

HARDY JAP. LILY BULBS

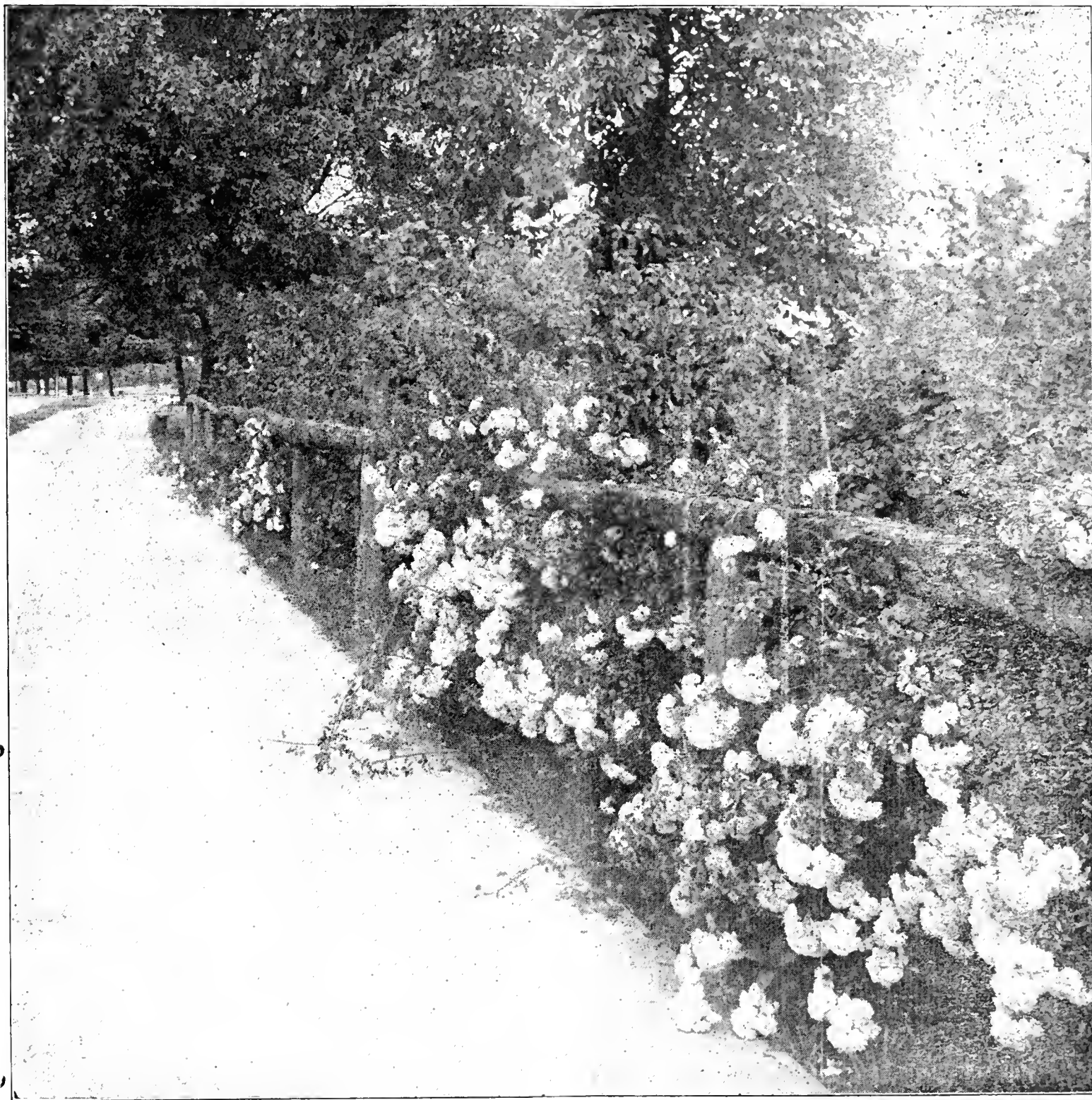
Such as Liliu AURATUM, RUBRUM, ALBUM, MAGNIFICUM, Melpomene, Roseum. Import prices. Case lots.

Fall or Spring Shipment

Write for prices

McHUTCHISON & CO. THE IMPORT HOUSE
95 CHAMBERS ST., NEW YORK

PAINESVILLE NURSERIES



Our nursery is headquarters for high-grade field-grown ROSES. Its annual production of Ornamental, Deciduous, and Evergreen Trees and Shrubs, Fruit trees and small Fruits, runs into millions. We are always glad to quote on any stock we grow.

THE STORRS & HARRISON CO.

NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

When writing to Advertisers please mention the National Nurseryman.

J. & P. Preferred Stock.


J. & P. Preferred Stock.

Not How Cheap, But How Good

is our slogan. It is our ambition to grow and sell the best there is in our lines,—because quality goods sell themselves, and at living prices. It isn't necessary to be always cutting under the other fellow.

We grow a pretty complete assortment but our specialties are—

Field-grown Roses	Ampelopsis Veitchii
Clematis, Large-flowering	Clematis Paniculata
Tree-form Hydrangeas	Tree-form Lilacs
Shrubs	Perennial Plants
Paeonias	Shade Trees

 Note: We sell to the trade only. Have no retail business of our own. Our trade customers get and are entitled to our very best stock and very best attention.

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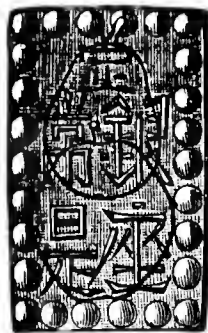
Jackson & Perkins Company

NEWARK - - NEW YORK

J. & P. Preferred Stock.

J. & P. Preferred Stock.

Heikes—Huntsville—Trees



Established 1872

1500 Acres

—

**FRUIT TREES
ROSES and other
ORNAMENTALS**

—

For the wholesale trade.
All of our own growing.

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HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

L. R. TAYLOR & SONS

Topeka, - Kansas

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FOR FALL 1917

=

A Fine Lot of

Apple Seedlings

JAPAN PEAR SEEDLINGS

Forest Tree Seedlings

=

-ALSO-

Apple Trees

Peach Trees

Pear Trees

Cherry Trees

Forest Trees

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of
Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX
and
HERBACEOUS PERENNIALS

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Write for our Special Prices

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SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY
GENEVA, N. Y.

70 Years

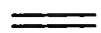
1000 Acres



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE



THE

North-Eastern Forestry Co.

CESHIRE

...Connecticut...



Where we grow "The Stock Too Good for Department Stores."

A block of young Conifers and Shrubs adjoining our new office building, with Ford Container in the rear.

Acreage planted now is 175 acres in stock; good blocks to dig this fall; sidetrack laid and storage-cellar and packing-house building.

Particular buyers who want something better than ordinary quality are invited to visit us and see our stock. Price and size do not determine quality.

PRINCETON NURSERIES

Wholesale Only

(But not to Department Stores)

Princeton,

New Jersey

J. H. Skinner & Co.

Topeka, - Kansas



Apple Seedlings

Japan and French

Pear Seedlings

Forest Tree Seedlings

FRUITS TREES

SMALL FRUITS

Rhubarb, Myatt's Linnaeus, divided roots, pure stock; Shade Trees, including a fine lot of Soft Maple and White Elm.

CATALPA BUNGEI

6½ foot stems, straight and smotoh

Bechtel's Double Flowering Crab

Ornamental Shrubs

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

**Rawhide Brand of Shipping
Tags and Tree Labels**

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

ORNAMENTAL

TREES, SHRUBS, VINES, EVERGREENS
HARDY HERBACEOUS PLANTS

225 Acres

Entirely devoted to the growing of the
best quality of ornamental nursery stock.

WHOLESALE ONLY

We also grow the "unusual" things, you
cannot find elsewhere.

Small Trees and Shrubs for
Planting in Nursery Rows.

We shall have our usual supply for Spring
delivery. Catalogue ready January first.

RAFFIA HEADQUARTERS

Supply of our usual brands on hand at
all times.

Thomas B. Meehan Co.,
WHOLESALE NURSERYMEN
Dresher, - Penna.

French Seedlings

If yours arrived complete—in good condition—well-graded
and properly packed—promptly handled and at minimum
importing expense,—stick to your present source of supply.
We can't offer more. But—if you didn't get all this,
our customers did and if you are interested, we will refer
you to some of them in your own state and you can ask
them about DELAUNAY'S grading and packing and the
service and expense. The proof of the pudding is the
pudding, you know.

War conditions in France—labor shortage, use of land for
food crops, etc.,—make seedlings scarce this year. We
can take care of our regular customers and some others.
Complete 1917-1918 list is ready. Ask for it. Ask De-
launay Customers anywhere what they think about his
stocks and our service.

John Watson & Company
NEWARK - NEW YORK

Agents for
F. DELAUNAY, Angers, France.

For Fall of 1917

*WE will have our usual line
of Ornamentals, Shade
Trees, Perennials, Apple,
Plum, Cherry, Peach, etc.*

C. M. Hobbs & Sons

Marion County

Bridgeport, - - Indiana

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa.

STARK BRO'S

Extra Heavy 2-Year Grape

Leading varieties, especially Concord. Strong tops and big roots, greatly preferred by the Retail Trade. Our heavy Extra No. 1 2-year grades will please your customers and cost no more than the ordinary No. 1 grade usually offered.

The vines we grow in Erie Co., Pa., in the fine grape soil along the South shore of Lake Erie, are unsurpassed.

In addition to Concords, we will have Moore Early, Niagara, Worden, and other standard varieties on which we will be pleased to quote.

Special prices for early buyers—send us your want lists.

Stark Bro's Nurseries LOUISIANA, MO.

Grape Nurseries in Erie Co., Pa. Best Grape Soil in America

The Best In Nursery Products

We carry a full line of fruit and ornamental trees, evergreens, shrubs, etc. Send us a list of your wants.

A FEW SPECIALS

Oriental Planes from 1¼ to 3 inch caliper. A large stock of Sugar Maples, American Elms, Carolina Poplars, Lombardy Poplars, Beech grafted River's, and Fern-Leaved, Double Flowering Japan Cherries, Prunus Pissardi, Flowering Apples, Flowering Peaches, Magnolia Tripetela, Japan and American Judas, Japan Walnuts, American Arbor Vitae, Hemlock and Norway Spruce, Altheas, Forsythias, Philadelphus, Viburnum Plicatum, Weigela, Eva Rathke, etc.

10,000 Downing Gooseberries, 2 years No. 1.

HOOPES BRO. & THOMAS COMPANY

THE WEST CHESTER NURSERIES

Established 1853 West Chester, Pa. Incorporated 1907



BERRY'S Wholesale Nursery

Small fruit plants in variety; rhubarb; horseradish; California Privet; Barberry Thunbergii; Hydrangea P. G.; Spiraea Van Houghti; Peonies, etc.

See list before placing your order.

P. D. BERRY,

Dayton

Ohio

We Are Prepared To Supply The Trade

ROSES, Field-grown, own roots and budded.
ABELIA GRANDIFLORA. Transplanted, field-grown.
BERBERIS JAPONICA.

AZALEA INDICA (Home-grown)

GARDENIAS.

ENGLISH LAUREL.

MAGNOLIA GRANDIFLORA.

MAGNOLIA FUSCATA.

OLEA FRAGRANS.

CAMPHOR (pot-grown.)

LIGUSTRUM JAPONICUM, LUCIDUM, NEPALENSE,
and other good varieties, fine bushy plants.

SATSUMA ORANGE. Field-grown, budded on Citrus
Trifoliata.

BIOTA AUREA NANA (Berckmans' Golden Arbor-
vitae)

BIOTA AUREA CONSPICUA.

RETINISPORA. In variety.

JUNIPERUS. In variety.

WISTARIAS. Grafted, best sorts.

APPLES.

JAPANESE PERSIMMONS.

ENGLISH WALNUTS.

MULBERRIES.

SPIRAEA THUNBERGII. A beautiful lot of stocky
plants.

A fine stock of Hackberries, Koelreuteria, Tulip Pop-
lar, Magnolia Purpurea, Texas Umbrella, Sycamore and
Elms.

Send us a list of your wants and let us give you
quotations.

P. J. BERCKMANS CO., Incorporated
Fruitland Nurseries, Augusta, Georgia

ENGLISH NURSERY STOCK

GROWN IN LARGE QUANTITIES

RHODODENDRONS, a splendid lot this season, fine bushy plants. Plenty of the hardy Catawbiense named varieties suitable for the American climate including the newer and superior kinds, and well budded plants for forcing.

AZALEAS, ANDROMEDA, KALMIA and other American plants in great variety.

CONIFERS a large stock, of all hardy kinds.

HARDY ORNAMENTAL, EVERGREEN and DECIDUOUS TREES. These at right prices.

ROSES. Dwarfs and Standards, all leading kinds in quantity.

CLEMATIS AND CLIMBING PLANTS.

FRUIT TREES Espalier trained pyramids and bush fruits in quantity.

FRUIT TREE STOCKS, APPLE, PEAR, PLUMS, etc.

A general assortment of hardy outdoor stock. Glad to answer inquiries.

No Agents. Write direct for wholesale catalogue to

WALTER CHARLES SLOCOCK, Goldsworth Nurseries, Woking Surrey, England

Half an hours rail from London & S. W. Ry., Main Southampton Line.

Over thirty years successful trading in the states.

Cable Slocock Woking A B C Code 5th edition used.

For FALL 1917 -- SPRING 1918

5,500 CATALPA BUNGEII, 1 yr. heads:
3-4 ft., 4-6 ft., and 6 ft. up.

20,000 CAROLINA POPLAR, 6-8 ft., 8-10 ft. and 10-12 ft.

120,000 BARBERRY: Thunbergii, Purple-leaf and Vulgaris, 2 and 3 yr. transplanted; 12-18 in., 18-24 in., 2-3 ft.

170,000 PRIVET: California, Ibota, and Amoor River, 2 yr., 12-18 in., 18-24 in., 2-3 ft.

Also a large and complete line of high quality Nursery stock for the Wholesale trade. Send for trade list.

T. W. RICE, GENEVA, N. Y.

=Strawberry Plants=

All of the standard varieties, also good stock of Progressive everbearing. We have ideal soil and climate to produce the best of strawberry plants, which make our prices possible. Shipping season from October fifteenth to May fifteenth. All plants are tied in bundles of twenty-six for twenty-five, and packed with damp moss in ventilated boxes. Each plant guaranteed first class and true to name. Before placing your orders write us for prices.

BUNTINGS NURSERIES

Box 2

SELBYVILLE, DELAWARE

Selbyville ships more strawberries than any other one town in U. S.

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Fall 1917

GRAPE VINES—One and two years old. Varieties largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas. Free from weed seeds, all recleaned and guaranteed first class.

Correspondence solicited. Price list upon request.

CHAS. M. PETERS

P. O. Address, Salisbury, Wicomico County, Md., R. F. D. 3

Long Distance Phone and Telegraph, Salisbury, Md.

The Framingham Nurseries

200 Acres
High Grade
Trees, Shrubs,
Evergreens,
Vines, Roses,
Etc.



Fine Stock
of
Rhododendrons
Kalmias
and
Andromedas

Send for Price List

W. B. WHITTIER & CO.

FRAMINGHAM, MASS.

We have a splendid stock of

Grape Vines

and other small fruit plants for the Nursery trade, graded up to the highest standard and sure to please you.

Give us a trial order, send in your list now for quotations

A. R. WHELOCK

SUCCESSORS TO
WHELOCK & CONGDON

North Collins, N. Y.

P. OUWERKERK,

No. 216 Jane St., Weehawken Heights, Hoboken, N. J.

Rhododendrons, Clematis, H. P. Roses, Hardy Azaleas, Paeonies, Magnolias, Box Trees, Fancy Conifers, Hydrangeas and Shrubs, our specialties at our HOLLAND NURSERIES. Some of the goods on hand here during the packing season.

Watch the Advertisements in
THE NATIONAL NURSERYMAN

They Bring the Answer
Address HATBORO Office for Rates

When writing to Advertisers please mention the National Nurseryman.

REMEMBER!

If its a hardy perennial or so called old fashion flower worth growing, we have it in one shape and another the year round. We have the largest stock in this country, all Made in America, and our prices—

Why say more here. Send for our Wholesale price list of varieties and benefit from the opportunities this affords you.

Our motto: "Maximum Quality, Minimum Cost."

Address, R. W. Clucas, Mgr.
Palisades Nurseries, Inc. Sparkill, N. Y.

You can save **Time** and **Money**

If you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

Sarachan & Rosenthal

64-66 Hanover Street
Rochester, - - New York

Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

Prepare for Fall by securing the best Cherry to be found. Our blocks of Cherry are the largest in the U. S. and quality the best. While the U Boats have been sending Mahalebs to the bottom the past two years, we have been fortunate in securing our usual supply and will have a splendid lot of trees to offer in the following:

CHERRY TWO YEAR general list of varieties

CHERRY ONE YEAR 11-16 up Sweets and Sours

PEACH ONE YEAR leading varieties

PLUM Japans, European and Hansen Hybrids

COMPASS Cherry and Apricots

APPLE leading varieties in connection with other stock only

Grafted English Walnuts and Northern Pecans

Special prices to car lot buyers on large orders

WE OFFER

Grape Vines, Currants and Gooseberries
in all varieties and grades

—also—

Grape and Currant Cuttings and Light
Grade of Vines for Lining Out
in Nursery Rows

WRITE FOR PRICES

F. E. SCHIFFERLI, Fredonia, N. Y.

We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER - - MARYLAND

We offer for Fall 1917

250,000 PEACH, 40 Varieties, 1 year buds

CALIFORNIA PRIVET, 1 year and 2 year

ASPARAGUS, 1 and 2 year

DOWNING GOOSEBERRY PLANTS, 2 year

BARBERRY THUNBERGI, 2 and 3 year transplanted

Can supply the above stock in car load lots or less, also, have a large stock of Rhubarb, Cumberland Raspberry Plants, Spireas, Deutzia Assorted, nice specimen plants. Evergreens, Horse Chestnut, N. Maple, Lombardy Poplar and Planes, etc.

We will make attractive low prices for early orders
Send List of Wants

For FUMIGATION With
HYDROCYANIC ACID GAS

"CYANEGBG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.
100 WILLIAM ST. - NEW YORK, N. Y.

WOOD LABELS

For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

Dayton Fruit Tree Label Co.
South Canal St., Dayton, Ohio

Hill's Evergreens

You can work up a good profitable trade in Evergreens if you have the right kind of stock. Our main specialty for over half a century has been the propagation of young Evergreen stock for the wholesale trade in immense quantities at low prices.

We have all the leading varieties in small sizes, for all purposes, suitable for lining out to grow on for your trade.

Nurserymen who have heretofore depended on Europe for their young Evergreen plants can now be assured of a good reliable source of supply right here in America, and we solicit the opportunity of quoting on your requirements.

"Made in U. S. A." and "American Stock for American Planters" should, from now on, more than ever, be the slogan of American Nurserymen for it means "money saved in the long run" to start with nice, strong, sturdy, vigorous American-grown stock which has been produced right here in America.

YOU want to keep posted on Evergreens;

WE want to become better acquainted with you;

Let's get together.



The D. HILL Nursery Co., Inc.

Evergreen Specialists

LARGEST GROWERS IN AMERICA

Box 401

Dundee, Ill.

Native Trees, Shrubs and Vines

At Special Prices
WHOLESALE ONLY

Sweet Hollow Nurseries

WEST HILLS, HUNTINGTON

Long Island,

New York

C. Van Kleef & Company

Nurserymen

BOSKOOP,

HOLLAND

Specialties: Kalmias, Andromedas, Ilex opaca, crenata, glabra, Azalea viscosa, nudiflora, calendulacea and arborescens, Cornus florida rubra, Vaccinium corymbosum and macrocarpa, etc., etc.

Representatives:—

John Van Kleef and John A. Driesprong

From 1 February until 1 June

Care Maltus & Ware,

14 STONE STREET

NEW YORK

*When once you have seen
our Boxwood, Rhododendrons
or other stock you always
would trade with us.*

Send us your want list,
we will give you special
prices.

MAHLSTEDT BROS.

Bergambacht, Holland

Growers of the better class of nursery stock

Care of Maltus & Ware, 14 Stone St., N.Y.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXV.

HATBORO, PENNA., SEPTEMBER 1917

No. 9

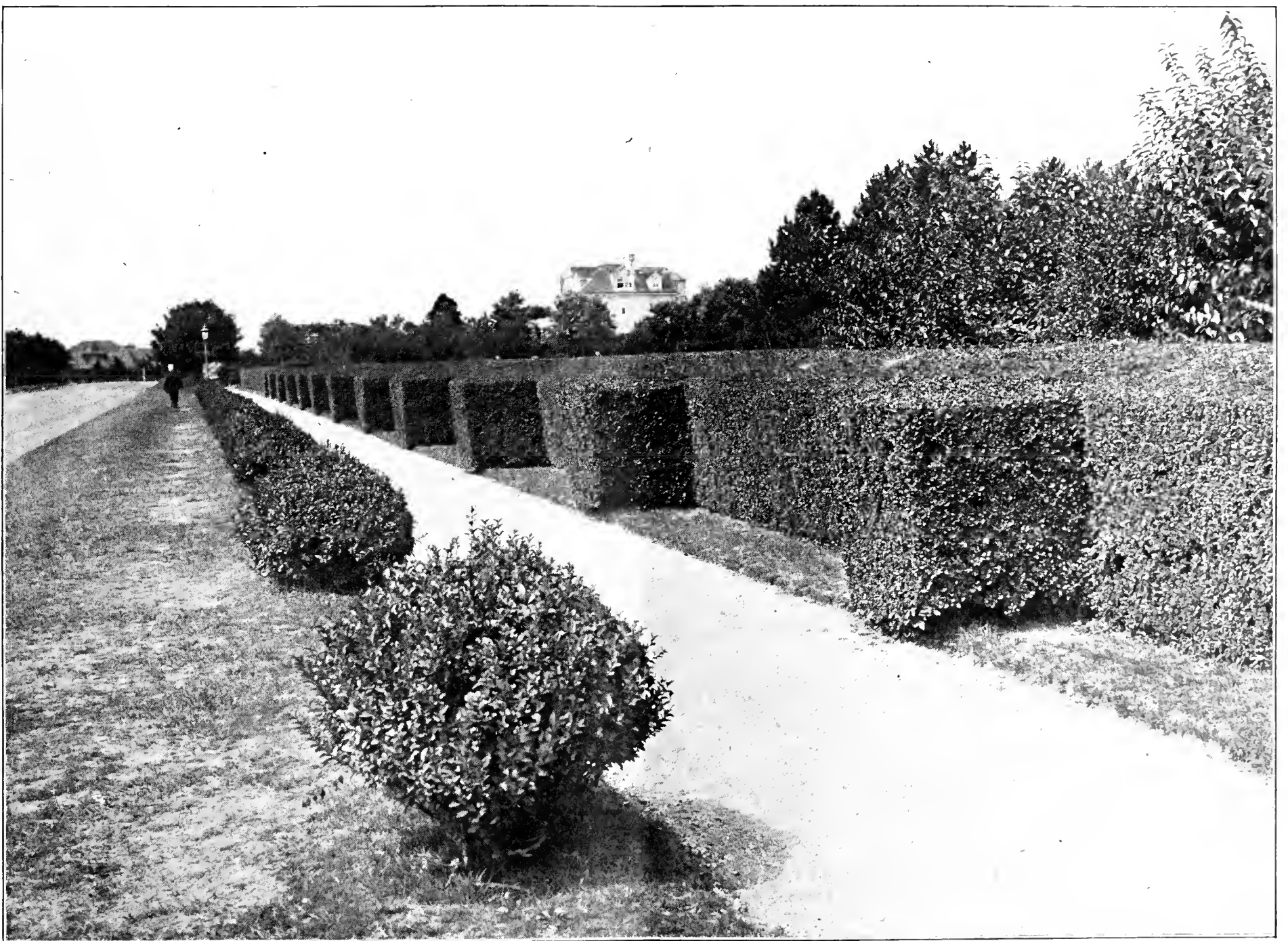
HEDGES

"To hedge or not to hedge" is often a question that puzzles the owner of a new home and grounds that need planting, and incidentally the nurseryman is appealed to for advice.

While it is often a matter of individual taste as to

use has become largely a habit, or, like the mantles in steam-heated houses, become purely ornamental.

There is something a little selfish about a hedge. I often recall as a boy in England the vain efforts to see the beautiful gardens either through or over them, but



California Privet Hedge (Ligustrum ovalifolium) Showing remarkable results that can be obtained by skilled attention in localities that suit it.

whether a hedge should be planted or not, it is always best to consider the hedge as a utilitarian feature rather than an ornamental one. In other words do not advise a hedge unless it has a purpose other than being ornamental.

Hedges were originally planted as barriers but their

since growing up I have also felt the need of a wall or hedge to protect the garden treasures.

If a hedge is needed either to mark a boundary, for a screen or to separate one section of ground from another for a definite purpose, select a suitable one and have it as handsome as possible. It is better to be without a

hedge than have one thin at the base, gappy, and uneven.

The California Privet is perhaps the best hedge plant in existence, in its particular territory, and for this reason it has become so common as to be tiresome and one longs for a little more variation, yet when it is well planted and carefully tended wonderful results can be obtained.

The Jersey Coast is famous for its Privet hedges as the salt air and sandy soil of the seashore seem to suit it. It rarely gets winter killed there, while a little further inland it is killed periodically even in the same latitude.

It would be disastrous to have such a hedge killed back as is shown in the illustration, as it would mean much labor and time to grow another one of the same dimensions and character. With many hedges, killing back is often a blessing in disguise, if the roots are not injured it will come up thicker than ever and a new one is readily formed in one season.

It is to be recommended when a Privet Hedge is old, or thin at the base, that it be cut down to within about six inches of the ground. This should be done in early April, just as the buds are beginning to push.

Too often when planting a new hedge, everything is sacrificed for immediate effect. The client is too anxious to get a full grown hedge right away. This is impossible. A hedge worth while must be grown from the bottom up.

Hedge planters usually have their own ideas as to distance between plants, double or single row, depth to which the plants should be set and cut after they are set, but whatever the opinion the hedge will be no better or more vigorous than the single plants composing it, and it will not be a success unless they all grow evenly and vigorously. To insure this the essentials are: a deep trench with good soil, no overhanging trees, young vigorous plants that have not been dried out, sufficient room between the plants to allow each one to develop (about one to every twelve inches is about right), set the plants down to where they branch, and cut the plants off level leaving not more than six inches above ground. If these are provided, a good thick hedge from the bottom up will be the result.

CONTROL OF PEACH BACTERIAL SPOT IN SOUTHERN ORCHARDS

(1) The peach bacterial spot, also known as bacteriosis, caused by *Bacterium pruni*, occurs in practically all peach-growing regions of the eastern half of the United States. It is most serious in the more southerly parts of this region. *Bacterium pruni* also causes a disease of the plum, affecting especially the Japanese varieties.

(2) Twigs, fruit, and leaves are affected, but the most serious injury is to the leaves.

(3) Experiments carried on by the writer and others indicate that the disease may be kept in check in southern peach orchards by proper pruning, cultivation, and especially fertilization. Nitrate of soda was by far the most efficient fertilizer used. Trees in which a high state of vigor and health is maintained are commercially resistant to the disease.

GRADING, BOXING AND BALING CHARGES AND TERMS OF CREDIT

At the fifteenth annual meeting of the Pacific Coast Association of Nurserymen held at Tacoma, July 11-13, 1917, it was unanimously voted that the standard charges for grading, boxing and baling and the terms of credit be as follows:

That apple, pear, cherry, peach, apricot and almond trees be graded in Grade No. 1, 4-6 ft. Calip., 1-2 in. No. 2, 3-4 ft. Calip., 3-8 in.

Plums and prunes, Grade No. 1, 6-8 ft. Calip., 9-16 in. No. 2, 4-6 ft. Ca. 1-2 in. No. 3, 3-4 ft. Ca. 3-8 in.

That all 6-8 and 4-6 ft. 1 and 2 year stock be tied 10 in a bundle and all smaller grades in numbers of 25. Smalls, including strawberries, in bundles of 50 each, except in case of extra large stock which may be tied 25 in a bundle. Two-year and 6-8 ft. stock should be tied with three strings. Other grades of trees with two strings. Each bundle should be plainly labeled with number, variety, and grade.

Unless otherwise ordered, all boxes should be paper lined and charges made for same as per following schedule, with a discount of 10% if unlined:

12 in. by 12 in. by 8 ft.	\$1.50	ad'l lengths	15c per ft.
18 " " 18 " " 8 "	2.00	" "	15c " "
18 " " 24 " " 8 "	2.25	" "	20c " "
24 " " 24 " " 8 "	2.50	" "	20c " "
24 " " 30 " " 8 "	2.75	" "	25c " "
30 " " 30 " " 8 "	3.00	" "	25c " "
32 " " 32 " " 8 "	3.25	" "	25c " "
30 " " 36 " " 8 "	3.50	" "	25c " "

TERMS OF PAYMENT AND CREDIT

Conditions for payment adopted and recommended are as follows: 60 days net. Discount of 3% for cash received with order and discount of 2% for cash within 30 days.

All bills become due and must be paid by June 1st or interest accrue from then or any prior date of maturity.

Further conditions of sale are as indicated on pages 56-57 of the 1916 annual report of this association.

C. A. TONNESON, *Secty. P. C. A. of A.*
Burton, Wash.

FOUND AT LAST

For years the northern states have been looking for peonies on hand for Decoration Day.

Umbellata Rosea, after years of trial has proved the earliest of all. Next comes Edith's superba, a fine fragrant pink. But we have long needed a red to match them, and give us more color. A. Brune, of Fairbauer, after years of patient work and after ten years of faithful test, has given us Richard Carvel. This flower has all the characteristics of a first class peony. It is very robust and healthy. A neighbor bought one last September. He cut it up, making three of one. Every root had a splendid flower. It is of deep, clear, glistening red, and is as fragrant as a rose. When you find a flower of such size—a rapid multiplier and ready to bloom on the least provocation, you have found a prize.

C. S. HARRISON, *York, Nebr.*

DURING OUR VACATION

While enjoying a drive through West Grove, Pa., we had the pleasure of viewing the beautiful cannas in the nurseries of Conard & Jones Co., and were fortunate enough to be shown the wonderful field of gladioli grown by N. Leon Wintzer, who gave us the names of many of the sixty varieties. Eight acres of gladioli, pink, lavender, yellow, purple, and red with their many shades. There was also a white variety named "War." Not only were the blooms beautiful but the straight rows of plants were so fine and healthy looking.

We came away with a beautiful bouquet feeling that we would like to spend many more hours in such a paradise of bloom.

BOX-BARBERRY

The Elm City Nursery Company, New Haven, Conn., have a new type of Japanese Barberry which they expect to offer to the trade the coming fall, under the name of Box-Barberry. It is of extreme compactness, with small glossy attractive foliage and very dwarf. The original plant is about fifteen years old and is not more than two and one-half feet high. It can be kept trimmed as low as three inches from the ground, with proper pruning. In sections where the box-edging is not reliably hardy, it should prove a very good substitute. It has all the good qualities of the ordinary Japanese Barberry, including the brilliant fall coloring. Landscape architects and others that have seen it prophesy a great future for it.

THE ARMY AND NAVY CLUB, WASHINGTON, D. C.,

August 7, 1917.

J. R. Mayhew, Vice-President,

American Association of Nurserymen,

Waxahachie, Texas.

My Dear Mr. Mayhew:—

Your most welcome letter reached me this evening and I want to thank you for your offer of assistance. You may be sure I shall lean heavily upon you and consult you often, also if the Government decides that they need my services for a considerable length of time, or decides to send me to France (I am now instructing the Field Artillery, Officers' Training Camp here at Ft. Myer) I shall feel that I cannot continue to act as President of the Association and in that case I shall have the privilege of placing the reins in most able hands.

I shall know perhaps very shortly just what the Government is going to do, at which time I shall immediately advise you, the Executive Committee and the Secretary.

I had hoped with your able assistance, and that of other progressive members, to accomplish a great deal this year for the nursery industry, but the Government call was one which I, with nearly eight years military service, could not honorably ignore, so I offered my services.

With very best wishes, I am

Most sincerely yours,

LLOYD C. STARK.

CHANGE IN THE OFFICERS OF STARK BROS.,
NURSERIES AND ORCHARDS CO.

Lloyd C. Stark, Vice-President and a Director of Stark Bros. Nurseries and Orchards Co., recently resigned and offered his services to the Government. He formerly served as a U. S. Naval Officer for eight years. In recognition of his former record he received a commission as Captain of the Field Artillery in the U. S. Officers' Reserve Corps and is now taking a 17 days' training at Fort Myer, Va., after which he will be subject to call by the War Department.

Paul C. Stark was unanimously elected as Director and Vice-President to fill the vacancy caused by the resignation of his brother, Lloyd Stark. Paul C. Stark has been connected with nursery work all of his life and is a graduate of the Horticultural Department of Cornell University, and later took a post-graduate course in nursery work at that institution. For a number of years he has been Assistant General Manager of Stark Bros., and has been in close touch with his brother's work as General Manager. With his experience and training he is well equipped to carry on Lloyd Stark's efficient and progressive work.

The present officers of Stark Bros. Nurseries & Orchards Co., are—

Edgar W. Stark, President.

Paul C. Stark, Vice-President.

Tom. W. Stark, Secretary.

Lawrence E. Stark, Asst. Secretary-Treasurer.

Eugene Duncan, Treasurer.

Out of 2000 officers at Fort Myer, Va., Lloyd C. Stark was one of four to receive a Major's Commission.

PROPAGATING ROSES BY FALL CUTTINGS

Climbing roses are propagated mostly by hardwood cuttings made in the fall, many cut flower roses may be propagated in the same way.

Hardwood cuttings are taken from the dormant wood of winter, while softwood, or green-wood, cuttings are taken when the plants are in active growth. To make a hardwood cutting, good strong, well-ripened shoots of the past summer's growth should be selected. These are better if cut between the time the leaves fall and freezing weather. If left until after cold weather there is danger of injury from freezing. They should be cut into pieces of 5 or 6 inches, with the upper cut just above a bud, and should be tied in bundles with raffia or with string that does not rot easily if exposed to dampness. After labeling plainly they should be buried in moist sand, tops down, and placed in a cool cellar or buried in the open ground below danger of frost. They should be planted in the open ground in the spring about or a little before corn-planting time, so that one or two eyes, or not over one inch of the cutting is above ground, which will leave 4 or 5 inches in the ground. Care must be taken not to injure the calluses that have formed while the cuttings were buried. Sometimes better results are obtained by planting in partial shade.

Frequently cuttings made in winter or early spring do nearly as well as those made in the fall, but in the North there is always danger of the wood being injured during the winter.



*Abner Hoopes,
Senior member of the firm of the Hoopes Bros. & Thomas Co., West Chester, Pa.*

Deans of the Nursery Business

We are very happy to have been permitted to publish the photograph of Mr. Abner Hoopes, senior member of the firm of Hoopes Brothers and Thomas, West Chester, Pa., and we feel very sure that many readers of the "National Nurseryman" will be pleased he waived his objections to having his picture published for once, especially those who have had the pleasure of meeting and knowing Mr. Hoopes, in years past, and recall his genial presence at the conventions in which he took such an active part.

It was his one deep regret that he could not meet his many nurseryman friends at the Philadelphia Convention.

There are few nurseries in America that can boast of being established on the same ground taken up and cleared in Colonial times by the ancestors of the present owners, such as is the case with the Hoopes Brothers & Thomas Co.

Here is a firm whose family came to America in 1683 from England, settled in the Chester Valley.

The great-great grandfather of the present senior member of the firm, Mr. Abner Hoopes, took up the land and cleared it, so that the land occupied by the present Hoopes Nurseries was brought into cultivation before the end of the seventeenth century.

The founder of the firm was Josias Hoopes, who like all good English stock had an intense interest and love for trees and plants. He was a botanist of considerable note.

The actual beginning of the great nursery of today

may be said to date from his importation in 1853 of ornamental and fruit trees from James Backhouse and Son, York, England. Some of these plants are still growing on the nursery.

In 1852 he built a small greenhouse and gradually accumulated a large collection of plants.

The present Mr. Abner Hoopes was a younger brother and worked with him in the upbuilding of the business under the name of Hoopes and Brother. In 1886 George B. Thomas was taken in as an office partner changing the name to Hoopes Brother & Thomas.

In 1904 the Thomas interest was purchased by Charles E. Cattel and Wilmer W. Hoopes, who were taken into the firm, resulting in 1907 in the present corporation of Hoopes Brother & Thomas Co., West Chester, Pa.

It may be that in many lines of business, youth, energy, efficiency and push can shorten time in building large enterprises but in growing trees and building up a nursery business worth while, time and lots of it is needed. It takes years to grow trees and years more to see them mature, select and improve stock as well as a sound business policy adhered to by each succeeding generation.

The House of Hoopes has grown very much in the same way as the choice specimen trees on their office grounds.

Although one of the pioneer nurseries of the United States it has kept in step with the times and is completely up-to-date in its stock, facilities and methods.

FIRE AT NEW ENGLAND NURSERIES

Fire destroyed several of the buildings of the New England Nurseries.

The fire was discovered in the pumping station, a two-story building, which was destroyed. The water supply was consequently shut off and some 200,000 plants in the greenhouses suffered damage.

A large storehouse just back of the packing house was saved, though it received a good scorching. One end of another storehouse was burned off. In the packing shed that was destroyed there were a carload of lumber and a large number of hot bed sashes. These also were lost.

The entire loss is estimated at about \$10,000, partly covered by insurance. Defective wiring is believed to have caused the fire.

J. G. Bachler has purchased the interest of A. V. Wickstrom in the Tolleston Nurseries, Portland, Oregon, and is now sole proprietor.

George C. Roeding, Fancher Creek Nurseries, Fresno, California, has been appointed a member of the federal exemption board.

ROLL OF HONOR

It is the purpose of the National Nurseryman to publish a roll of honor consisting of the names of those nurserymen serving in the United States army in the present war. We shall appreciate it if our readers will send us their names and photographs if possible.

Lloyd C. Stark, Major of the Field Artillery, U. S. Officers' Reserve Corps.

Vice-President and a Director of Stark Bros. Nurseries and Orchards Co., Louisiana, Mo.

President of the National Association of Nurseries. Meredith P. Reed, Captain, Sixth Company Section U. S. Officers' Reserve Corps.

Vincennes Nurseries, Vincennes, Indiana. George C. Taylor, Battery F, Second Pennsylvania Artillery. Thomas Meehan & Sons, Germantown, Phila. Wade Muldoon, Headquarters Train and Military Police, Mt. Gretna, Penna. Thomas Meehan & Sons, Germantown, Philadelphia.

The Watrous Nursery Company, Des Moines, Iowa, was placed in the hands of a receiver by the District Court, on August 14th. H. L. Merkel, former secretary of the company, has been appointed receiver.

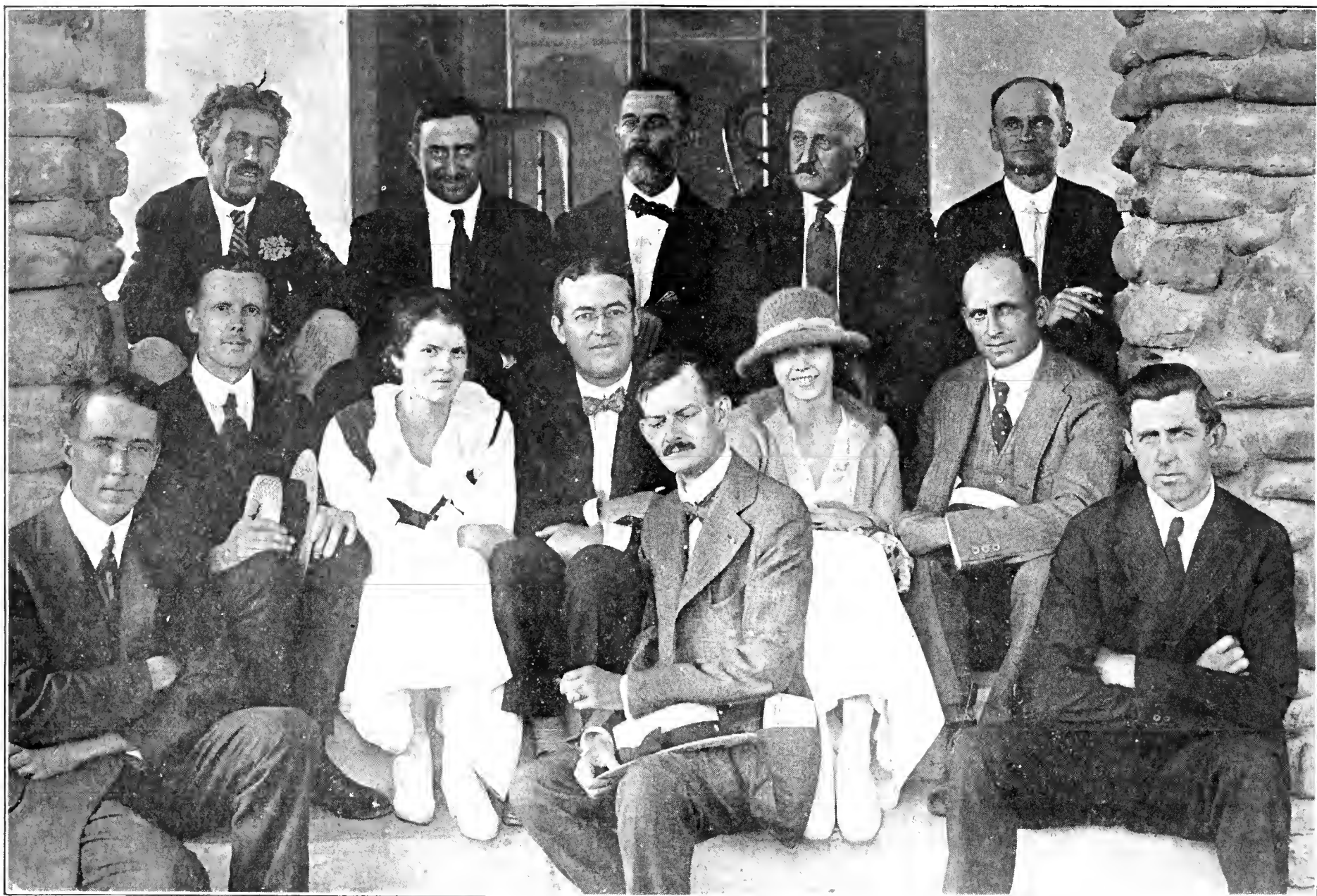
Standardization—Organization—Cooperation

Address by J. R. Mayhew, Watahachie, Texas, before the Philadelphia Convention.

I AM not unmindful of the titanic obligation I assume when I come before you to speak on this subject, and had I not been urged by friends over the country generally to attempt this further service of endeavoring to strengthen our organization, and were I not led in this attempt by a desire to render you a service, I could but wish that some other one of you had my place on

shall repeat some of the things I shall say, it will not be amiss.

We are to-day face to face with conditions the like of which the world has never known and the outcome of which no sane person would hazard an opinion. The world is at war, and while we are far removed from the battle front, the results of all the waste is becoming more



Left to right; Top row—E. F. Coc, Elm City Nursery Co., New Haven, Conn.; Mr. Pine, Hicks Nurseries, Westbury, N. Y.; Wm. Flemer, F. & F. Nurseries, Princeton; W. W. Hunt, Hartford, Conn.; Chas. Adams, I. W. Adams Nursery Co., Springfield, Mass.; Center Row—J. Harrison Dick, Editor Florists Exchange; Miss Alice Watson, Wilmer W. Hoopes, West Chester, Pa.; Miss Helen Flemer, Stephen Hoyt, New Canaan, Conn.; Bottom Row—F. Burnette Keller, Princeton Nurseries; John Watson, Carl H. Flemer, F. & F. Nurseries, Springfield, N. J., visitors at Princeton Nurseries, August 9, 1917.

this program. The program before you for rendition at this meeting is made up of live subjects, all more or less related to the questions which I am to discuss at this hour, for after all the progress of the world depends very largely on organized cooperative effort. Hence, if I shall traverse some ground which has been covered by the speakers preceding me or if those who follow me

and more distressing and a portion of this cost must of necessity be borne by our business. Our duty to-day is to shape our affairs to meet the conditions of the hour. One thing is apparent to all, and that is the policies of the past and the present will not suffice, and whether we accomplish the ends sought individually or cooperatively is for you to determine during the days of this conven-

tion. Within the next few days a war tax will be levied on practically everything we touch, from the carriage of your letter to the bill of lading issued for the carriage of your goods to the customer. Positively the only tax from which you will be exempt will be the tax on your net earnings, and thereby hangs our story. We offer no protest against our part of this war tax, for the nurserymen are loyal citizens and will bear uncomplainingly their part of the cost of this conflict, but what I want to get before you is that we must shape our affairs to meet these new conditions or go out of business. There is no product used in the maintenance of your business which has not advanced and is not advancing daily at an alarm-

can help ourselves and one another through co-operative effort directed through the leadership of a strong business organization.

STANDARDIZATION

One of our greatest needs is standardization, and I use the term in the broadest possible sense. Right here I am reminded of the magnificent address delivered at the Milwaukee convention by our worthy president on this subject, and I only wish the suggestions which he made last year at Milwaukee had been followed, when I feel sure that we would have accomplished much toward standardization which has been delayed. We have accomplished something, to be sure, in the recent past here,



Princeton Nurseries Office.

ing rate. You cannot do business during the season of 1917-18 on the same basis of prices and under the same policies of the past season without incurring loss. I am not an alarmist and I do not believe the world is going to the "demnition" bow-wows. I believe, on the contrary, that out of all this chaos will come order and law, and that business as individual, purged of the dross through this mighty conflict, will live and render more efficient service because of its travail. If what I propose seems to abridge your rights as an individualist, let me say in advance that it is only destructive individualism with which my plans would interfere. Individualism is the sacred and inherent right of every true American, but I think we are all agreed that unless our individualism is constructive we can well afford to dispense with it. I want, then, for a little while, to tell you how I think we

but I hardly think we have accomplished all that is needed.

(a) First, there should be standardization as it pertains to grading and packing, and this standard should be applicable and binding anywhere within the United States.

Every tree and plant should be sent out under a correct standard of grading and should be as good in Western New York as in Iowa, Alabama, or Texas. The standard case or bale should be of certain size and should be charged for, not as is true to-day, at \$1.50 to \$4.00, but at a standard price. In adopting a standard which should apply all the way through, care should be exercised so that no doubt would remain in any member's mind pertaining to grading and packing. Under existing conditions, a car load of shade trees, for instance, purchased of

one grower will be calipered at the crown, while from another grower they will be calipered six inches above the crown, which necessitates an endless amount of correspondence and oftentimes something decidedly more costly. In this connection, and in passing this whole matter should be referred to a special committee, a higher grade of peach, plum, and apricot seems to be demanded in the south than in other sections of the country.

(b) Standardization of agents' contracts and our dealings with agents. To the member who deals exclusively wholesale, this is not a problem, but to many of us operating with salesmen in the same territory we should at least come to a better understanding. What part of a dollar's worth of sales in commissions justly belongs to the salesman, and when should said commissions be paid? The salesman is coming more and more to believe that he is entitled to the lion's share, and his position is doubtless the result of the keen competition among nurserymen for his services. Without in the least abridging the right of contract, would it not be possible for us to come to a better understanding among ourselves concerning this question? Furthermore, should not every one of us respect the rights of every other member of this Association and quit overbidding for the services rendered by salesmen? I think, furthermore, that every member of this Association should file with the Secretary the name of every undesirable salesman at least once a year, and oftener if necessity arises. A member desiring information concerning an applicant would thereby get the same dependable information concerning salesmen as is possible today from the Protective Association on growers and nurserymen generally. If, when this information is available, a member writes a contract with a salesman listed as undesirable, it should be grounds for dropping him from the Association.

There needs to be a house-cleaning here. Would not some such plan as I have suggested purify the sales end of the business? Would it not get rid of a lot of "bum" tree peddlers, and would it not save a lot of us money who gamble on retail sales?

(c) Standardization in advertising. I do not know that I can make myself thoroughly understood when I attempt to define a standard in advertising. The advertising clubs of America are hammering away on this question, and to good effect. The thought I hope to get before you is that our advertising should be constructive, should be honest, should ring true of a service that is competent, not something cheap, but something valuable. Pick up any one of a dozen farm journals during the planting season and you will become thoroughly sick over the character of advertising some people are doing. "First class peach or apple trees at 2c each" is a lie. The firm who writes the advertisement, the paper that receives and prints it, and the public who reads it, know that it is a lie. I believe our advertising should stand for par plus, furthermore, that we should look with disfavor on that character of advertisement carrying prices, whether at one price or another. Some day after we learn the worth of co-operation, we will advertise co-operatively, and will thereby get results and a character of publicity we shall not be ashamed of. I favor a plan which will force out of this organization any member who is responsible for an advertisement, whether issued

publicly or privately, that is not one hundred per cent. truth. Furthermore, in the matter of advertising, it is a colossal blunder for wholesale lists to be so cheap that after the bona fide nurserymen over the country have been supplied a few lists are left on hand for distribution to "commercial orchardists" planting a dozen trees or more, town site developers, etc., etc. To be sure, there are some honest mistakes here, and I am of the opinion that most of us favor a restricted mailing list for our wholesale trade lists, but we have been too careless and some of us have been too anxious to sell stock wholesale. There is a way to safe-guard the matter of wholesale trade lists going to people who are not entitled to wholesale prices, and it is up to us to find that way and walk therein. The nurseryman who knowingly places his wholesale trade list in the hands of a retail customer is unworthy of membership in this Association and should forfeit it.

(d) Standard in Ethics. Put on the soft pedal here? By no sort of means. The highest known standard is none too good for the nurserymen of America. One of my good friends suggested a subject for this program which should have been included, "The Esprit de Corps of the Nursery Business." That subject goes to the heart of the question. The spirit, the high purpose of men associated together in a common cause. It is worthy of our best thought, and, my friends, as much as it shames us to admit it, we need to clean house here and the cleaning should be from cellar to garret. We know there are policies practiced by some in the nursery business which only the search-light of constructive criticism will correct, and we ought to get busy and get the job off hand. House cleaning is a most despicable job, and when in the nature of things it has to be done, we take to the woods and leave our wives to face the issue alone, but it is a better place to live after the ordeal. A bill is introduced in congress named "misbranding" and the news drives us to desperation. Why? "Get busy with your Congressman and Senator" is the cry from one end of the land to the other. How many times we have found ourselves seriously embarrassed endeavoring to compose letters in opposition to bills that, to say the least of it, had some merit, and which were intended to correct irregularities which have brought the business into disrepute. A bill which provides that salesmen, before offering nursery stock for sale, procure a "clean health certificate" from accredited authority, gives us business hysteria. Why? We do not want anybody "nosing" into our private affairs. Are there good and sufficient reasons? This is an executive session, the doors are closed and nobody is present except us, no report of what I say will be printed, hence I can say these things. I am not scolding, neither am I preaching, but I want you to get this, there is going to be a house-cleaning and the issue is squarely up to us. We can do the job if we will, and we should, but it is going to be done and if we refuse, it will be done for us. Indiscriminate substitution is a crime, and so long as practiced will degrade and debase the business. Just so long as salesmen without character are given credentials to sell our products, just so long will we continue to be embarrassed. These are only exceptional cases, to be sure, and in the main the ethics of the nurserymen are not inferior to the ethics of men engaged in other lines of business. "Ye are clean, but

not all," and so long as there is left even one to defend policies of the ancient past, they should be condemned, yea, such a one should be scourged from this Association. You think it necessary that the membership of this Association be largely increased, and I am in hearty agreement therewith, but one thing we should demand above all else is that no member should be admitted to our councils whose business ethics are questionable. Let it be understood that a member guilty of unfair or questionable transactions is unwelcome among us, that there is no room in this association for such an one, write this provision into your constitution and live up to it, and the effect will be salutary. I know I but speak your sentiments when I say again that the highest standards are not too good for the nurserymen of America.

(e) Standardization in prices, wholesale and retail. Here we reach the climax in the discussion of the question of standardization, for after all this is the meat in the cocoa-nut. I am not unmindful of the obstacles which confront us when we approach this problem. I am aware that by both federal and state statutes we are pro-



Princeton Nurseries Office.

hibited from entering into any agreement, that we are prohibited from combining to fix and maintain any sort of prices. What I shall say and what I shall propose shall be safely within the authority of the laws of the land. One thing about which we are all agreed is that in the matter of costs of our products there is chaos. Talk to any man about the cost of producing trees and plants and he goes up in the air. He tells you candidly that in his opinion there is no way to arrive at these costs, and I verily believe this is our great blunder. Now then, I would not fix the selling price, but I would figure as nearly as possible the cost of production. Suppose, and this is my plan, that we appoint at the expense of the Association a thoroughly competent commission comprised of the best material obtainable, and made up of men who are engaged in both the wholesale and retail trade, to definitely, or as nearly as it is possible for them to do so, determine the cost of producing trees and plants grown

and sold in America. Suppose they would, after exhaustive research, bring before this body a report that in their opinion $\frac{5}{8}$ peach trees cost \$80.00 per thousand, and that a less price than this would be less than the average cost of production for this grade of peach. Would it not be a chart to guide us on this troublous sea? And so all along the line they would indicate the costs, which, to a degree at least, would enable the wholesaler to approximate the worth of his products. But we cannot stop here, for this stock must go into the hands of the planter before anybody gets any money out of it, and this Association must serve as consistently the retailer as it does the wholesaler. This commission must continue their investigations until the retailer and his marketing costs are accounted for. I believe this commission can get dependable information on this question which will lead us out of the wilderness of doubt, and while it is not to be hoped or desired that competition among us should be abridged or that every man, whether wholesaler or retailer, will sell his products at the same price, it is possible and desirable that there should be at least some uniformity in prices, both wholesale and retail. The time will not come, nor should it, when superiority of service coupled with a pleasing personality will not receive its due reward, but it would be desirable and helpful to all alike if there could be adopted some standard of costs which could be used as a basis, at least, for figuring prices.

I hear some skeptic say this thing cannot be done. I want to say to you that it can be done and that it will be done if any considerable number of us will do our part. Some other critic says, "Oh, well! You can gather the data and it would be workable if the members would follow the commission's lead. I believe the members of this Association in the main are anxious to adopt constructive policies and that they are hungering and thirsting for a plan of procedure which will be safe and which will guarantee their families a living. Furthermore, if something of this kind is not done, if the nursery interests of America are not somehow gotten on a more stable basis, if, in other words, the business is not made to pay reasonable profits, there is little incentive for one to give it the thought and energy that is so necessary in making a business go. Again I want to say that this plan can be made to work, for "he can who thinks he can." The question is, are we willing to give it a fair and impartial trial. Have we suffered long enough? If we have, it will work.

(Continued in the October Issue)

WEDDING BELLS

Albert F. Meehan and Emilie Margaret Duerr were married at the home of the bride's parents, Mr. and Mrs. Theodore Duerr, Mount Airy, Philadelphia, Pa., August 8th, 1917.

After the ceremony the happy couple left for Rockland Breakwater, Maine, and are spending their honeymoon traveling in that state. They will be at home after November 1st, at 301 Dorset Street, Mount Airy, Philadelphia, Pa.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance	\$1.50
Foreign Subscriptions, in advance	\$2.00
Six Months	\$1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements. Drafts on New York or postal orders, instead of checks, are requested by the Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be addressed, Editor, Flourtown, Pa., and should be mailed to arrive not later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., September 1917

DEVELOPING A MARKET "The Little Pruning Book," an intimate guide to the sure growing of better fruits and flowers by F. F. Rockwell. Published in the interest of better gardening by the Peek, Stow and Wilcox Company, makers of quality pruning shears, Cleveland, Ohio.

When this attractive little book of fifty pages, with its stiff board cover, came to the editor's desk, he naturally thought it was for review and to sell at so much per copy, but nothing of the kind. It is an advertisement to develop a market for the Prexto Pruning Shears. If the shears are as honest as the book, and we have no reason to doubt it, they are good tools.

All this preamble leads up to the question, if a manufacturer of shears publishes a book on pruning with the avowed purpose of selling pruning shears;

The growers of citrus fruits advertise the use of lemons for the complexion, to increase the demand;

The powder manufacturer advertises the uses of dynamite in every conceivable way, and so on

Is it not about time the nurseryman made some organized effort to encourage the larger use of apples so they would sell more fruit trees?

And a larger use of ornamentals so the world would be a more beautiful place to live in?

We all think it is, but cannot get started.

EXECUTIVES. The meaning of the word executive as applied to business is the manager or governing head. It may be only one man, the proprietor, or a number of heads of departments with a chief. If a business is a failure or not a success, it is the chief executive who is to blame, because he is the only one who has the power to move obstacles to success. Subordinates can often give valid excuses for unsuccess as they have not power to change causes or conditions.

Are you an executive that really executes or have you

your nose buried in detail so that you cannot see the larger aspects of your business.

The two essentials the chief executive of a business should be closely in touch with are complaints and new business. With these at least under close supervision he can keep fairly well posted on the conditions of things and quickly find out where closer supervision is needed.

It is a great temptation for an executive to get down to detail work, especially in busy seasons, but it is always a questionable proceeding if it in any way interferes with his keeping in constant touch with the business as a whole.

The most successful managers are those who never do anything themselves they can delegate to someone else that can do it as well, and are rarely at a loss to pick a man with ability to do all necessary detail work.

It never pays for a five dollar man to do work that can be done by a three dollar man.

LLOYD C. STARK It will be with mixed feelings of regret and approbation that nurserymen will learn of the resignation of Lloyd C. Stark from the presidency of the National



Major Lloyd C. Stark, U. S. Field Artillery

Association of Nurserymen and the offer of his services to the government of the United States. Regret that the Association has lost such a valued officer at a critical

time in its affairs, and approbation of the step taken by Mr. Stark.

We can feel proud of a man, the head of one of the largest nursery concerns in the United States, recently elected to the highest office that can be conferred by the nursery business, and who can give up all and unselfishly devote his services to his country.

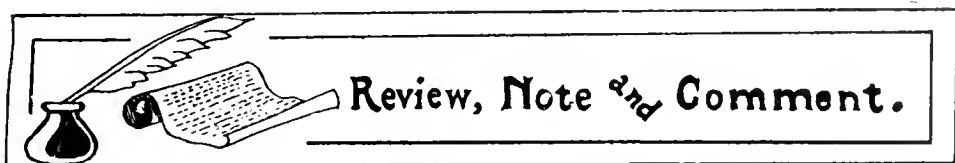
We shall all look forward to happier times and hope to see Mr. Stark return to civil life and take up his interest and duties in connection with the National Association.

MR. MAYHEW AND THE NATIONAL ASSOCIATION

It does seem as if the hands of fate were guiding the affairs of the National Association. Through the resignation of Lloyd C. Stark from the presidency of the National Association, the duties will naturally fall on the shoulders of Vice-President J. R. Mayhew.

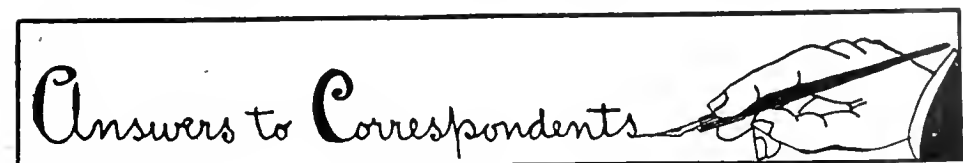
It was through the vision and energy of Mr. Mayhew the Association was reorganized along its present lines. Mr. Mayhew will have an opportunity to guide the affairs along the lines he urged and which were so clearly outlined in his address before the convention.

Under the present turn of events the address made by Mr. Mayhew at the Philadelphia Convention, published on separate page, takes on added meaning and the ideals expressed therein become appreciably nearer to realization. It was an inspiring address and will doubtless stand as the code governing his actions during his presidency.



C. E. Wilson & Co., of Manchester, growers and importers, have engaged in the retail and agency business and report business coming in fine style.

W. K. Labar has purchased 85 acres of land at Stroudsburg, Pa., with a view of establishing a nursery at that place. He will specialize on native azaleas, rhododendrons, kalmias and other ericaceous plants, trading under the name of La Bar's Rhododendron Nursery.



The Editor The National Nurseryman:

We bought a quantity of cherries two years old and they are nearly all apparently dying. They start growing all right, then without any apparent reason the growth withers. Our soil is good and the stock is properly planted. We have had this experience for the past three years.

The writer thinks the stock they were grafted on is the wrong sort, as no fibrous roots are produced and the two or three there are, being very poor, stubby and short.

J. V.

It is rather difficult to diagnose the trouble with the cherries without actually having had experience with these particular plants. The trouble, however, is not

at all uncommon. Cherries at the best have a very poor root. It does seem as if the buds push at the expense of the tree, and then as there is no root, the growth withers away, very often not starting again.

From experience this usually happens with late planting. The trees having been stored are suddenly brought out into conditions which excite growth rapidly. I hardly think it is so likely to occur if the trees are put out early.

What stocks were they grafted on, Mazzard or Mahaleb?

If you could give a little more detail as to when the trees were planted and the weather conditions following the operation, we could perhaps arrive at a decision.

Milwaukee, Wis., July 24th, 1917.

Will you please advise the cause of mushrooms growing on a lawn. I have a nice lawn about 60x120 and these little mushrooms grow in numerous places, say every five or six feet. They are only little things with stems about the size of a match and grow about two or three inches high. They are flimsy like and I can kick them over very easily and they seem to be destroyed.

Are they caused by too much moisture or what would be the reason as we haven't had any for two years. We have had an awful lot of rain this year and I wonder if this is the reason for them growing? A. P. K.

The spores or seed of the mushrooms, or fungus, you speak of seem to be pretty generally present everywhere, and it only takes proper conditions of temperature and moisture to start them into growth. They may be said to come from decaying organic matter and are very commonly seen on decayed wood and where there is an old tree stump in the ground.

There is little doubt but what the excessive rain that you have had has produced the crop on your lawn.

As you know, the edible mushroom usually comes in August and September, when the ground is very warm and following the fall rains. They seem to appear overnight and vanish just as quickly. There is little reason to believe but what they will disappear from your grounds and very likely not put in their appearance again until the proper conditions of moisture and temperature start them and it may not be for several years.

The Department of Agriculture publishes a bulletin on the subject. If you are interested it may be worth while to write them for it. There are a great many varieties and make a very interesting study. Some of them are poisonous, others negative and others again, like the mushroom, are edible.

Very truly yours,

EDITOR.

Connecticut Nurserymen's Association Annual outing was held at Lake Compounce, August fifteenth. As usual on these occasions, everyone enjoyed themselves. The barbecued lamb and other eats were fine.

Swimming, base-ball, bowling and other attractions of this popular summer resort caused the day to pass quickly and all voted it to be one of, if not the most successful of our summer meets. About forty-five were present.

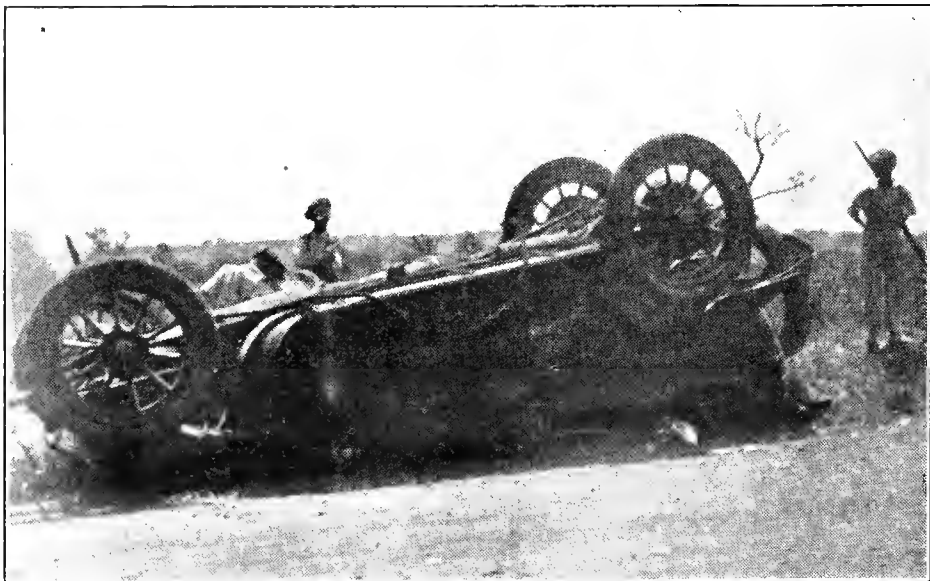
THE KANSAS NURSERYMAN IS UP AGAINST IT AGAIN

Editor National Nurseryman,

Dear Sir:—

You will remember my writing you, recently, setting forth a number of useful stunts that could be pulled off with a Cadillac Auto. The writer saved many a dollar last fall by hauling loads of trees, seedlings, etc., behind the auto. Just recently we pulled off a stunt that helped materially in balancing the account.

A short time ago the writer's youngest son and a friend started out for a little ride before taking "Dad" down to the office. They were coming back on a beautiful stretch of road and I suppose were hitting up a pretty lively clip. Just as they reached the crest of a hill, a buggy loomed up in front of them well to the left side of the road. They barely had room to pass on the left and were preparing to shoot by. The woman driver jerked the horse suddenly to the left, which prevented them from passing. It was either a question of smashing into the buggy and killing the occupants or swerving sharply to the right and taking chances on upsetting. The boys



choose the latter and as you will see from the photo enclosed, they upset and did a good job of it too. However, in passing the buggy to the right they caught the top and right wheel of the buggy. They snatched the seat off the buggy and set the four occupants down in the middle of the road. An old lady had two ribs broken and the other three occupants were badly skinned and shaken up.

The writer has just finished paying several hundred dollars in claims and doctor bills.

Just the day before I left for the convention, a friend persuaded me to take out some indemnity insurance. When the accident occurred a few days after my return, I had forgotten all about the insurance, but, believe me, I was very glad to be notified that I had some. I am now strong for indemnity insurance. As far as the Cadillac is concerned, I had no collision insurance and when I came to figuring the new parts that were required and got to \$400.00 I quit figuring and the auto is still in the garage unrepai red.

The two boys were riding in the front seat and were thrown into the tonneau and fortunately for them, each landed under a rear door. The backs of the seats held

part of the weight of the car off them, otherwise they would have been killed. If you will examine the photo carefully you will see how much room there was under the door. The boys were badly skinned up, but are now out of the house and all right again.

When the accident occurred, the top of the car was up. If you will turn the photo up side down, you can see better how much of it was left. The writer is now driving a "flivver."

Yours truly,

L. R. TAYLOR & SONS.

SYSTEM

There is nothing quite so profitable and satisfactory to a business as a well adapted system for handling detail and there is nothing quite so expensive and foolish as one that is used for system's sake.

Due to the changing conditions, the nurseryman must necessarily do everything possible to handle his business in the rush seasons. Green help is quickest taught to follow a simple routine both in office, packing shed and on the grounds, and the temptation is great to overload the business with checks, routines and methods that retard rather than facilitate.

There are no ready made systems that will fit every business, each one has to work out his own, and here is where the manager can show his worth. If the office boy forgets to send the mail off in time to catch the five o'clock train through being assigned to some other work, it is not always wise to delegate some other employee to check up his work to see that it does not occur again. It may not.

If a piece of correspondence is lost and disrupts the office for an hour or so, it is not always profitable to inaugurate an elaborate system to prevent such an occurrence in the future. Maybe the system will take an hour a day to work it.

If there is a loss of about six dollars' worth of tools a month out on the nursery, it is not profitable to spend ten dollars a week in wages to have a man check them as they come and go from the tool house. If you expect to get a full day's work out of a man or woman, do not overload with elaborate time sheets, and reports, unless they are really indispensable.

Systems grow like weeds and are just as likely to choke out efficient work as weeds are to choke out the plants.

It may be the business has reached a point where it is no longer feasible to fill the order from the original so that a copy must be made to send out into the nursery. It only takes a little more time and paper to make a carbon copy as well so that one can remain with the correspondence and be there to refer to should inquiries come from the nursery or packing house in relation to it. A little later it will be found a carbon copy would be useful so that the other department may be getting up their section of the order at the same time.

By now the packing clerk decides he ought to have a copy so that he can tell when the order is complete and be better able to get the order shipped on time. The system is growing. The billing clerk needs a copy with prices attached, and maybe a copy ought to be sent to

the customer as acknowledgment. By now a manifolding machine is wanted as some of the copies are hardly legible and more are needed for the different departments. And still there is room for the system to grow. The checking and re-checking necessitate their own particular systems to keep things going smoothly. The varying state laws also require a system to keep tab on them, also systems in relation to selection, digging, packing and handling. The main system may stop growing about this time, but the offshoots will keep on spreading. There is only one thing that will prevent it and that is an annual or biannual pruning to keep it down to its purpose—A profitable help to running the business.



William P. Stark, Neosho, Mo., and Ex-President John Watson looking over the new offices at Princeton Nurseries.

August 19, 1917.

National Nurseryman,
Hartboro, Pa..

Gentlemen:—

Enclosed find check for one dollar for which please enter my subscription to "The National Nurseryman." It has been over a year since I have seen a copy and I miss it very much. Was formerly with the Glen St. Mary Nurseries Co. of Glen St. Mary, Fla., but am now connected with the State Plant Board and U. S. Dept. of Agriculture, Bureau of Plant Industry.

Trust you will send a copy right along.

Yours very truly,

C. E. BROWNE,
P. O. Box 345, Sebring, Fla.

AMERICAN ASSOCIATION OF NURSERYMEN

President—Lloyd C. Stark, Louisiana, Mo.

Vice-President—J. R. Mayhew, Waxahachie, Texas.

Treasurer—Peter Youngers, Geneva, Neb.

Attorney and Secretary for the Association—Curtis Nye Smith, Boston, Mass.

Executive Committee—John Watson, Chairman, Newark, N. Y.; J. B. Pilkington, Portland, Oregon; John H. Dayton, Painesville, Ohio; Henry B. Chase, Chase, Alabama; Theodore J. Smith, Geneva, N. Y.; J. R. Mayhew, Waxahachie, Texas; E. S. Welch, Shenandoah, Iowa; Lloyd C. Stark, Louisiana, Missouri.

CHAIRMEN OF COMMITTEES

Arrangements—Thomas B. Meehan, Dresher, Pa.

Arbitration—W. C. Reed, Vincennes, Ind.

Exhibits—Albert F. Meehan, Dresher, Pa.

Program—J. R. Mayhew, Waxahachie, Texas.

Report of Proceedings—Curtis Nye Smith, Boston, Mass.

Nomenclature—J. Horace McFarland, Harrisburg, Pa.

Tariff—Irving Rouse, Rochester, N. Y.

Press—Ralph T. Olcott, Rochester, N. Y.

Telegraphic Code—R. C. Chase, Chase, Ala.

Hail Insurance—Frank A. Weber, Nursery, Mo.

Publicity—F. L. Atkins, Rutherford, N. J.

Distribution—M. R. Cashman, Owatonna, Minn.

Legislation—William Pitkin, Rochester, N. Y.

Transportation—Charles M. Sizemore, Louisiana, Mo.

Landscape—W. H. Wyman, North Abington, Mass.

WOMEN OF THE AMERICAN ASSOCIATION OF NURSERYMEN

President—Mrs. E. S. Welch, Shenandoah, Iowa.

Vice-President—Mrs. W. C. Reed, Vincennes, Ind.

Secretary—Mrs. E. R. Taylor, Topeka, Kansas.

Treasurer—Mrs. E. E. May, Shenandoah, Iowa.

STATE AND DISTRICT ASSOCIATIONS

American Nurserymen's Protective Association—President, Irving Rouse, Rochester, N. Y.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.

American Retail Nurserymen's Protective Association—President, H. W. Marshall, Arlington, Nebraska; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.

Association Oklahoma Nurserymen—President, P. W. Vaught, Holdenville, Okla.; secretary, Jim Parker, Tecumseh, Okla. Next meeting during week of State Fair at Oklahoma City, last of September or first of October.

California Association of Nurserymen—President, John S. Armstrong, Ontario. Secretary, H. W. Kruckeberg, Los Angeles, Cal.

Canadian Association of Nurserymen—President, E. D. Smith, Winoona; secretary, C. C. R. Morden, Niagara Falls, Ont.

Connecticut Nurseryman's Association—President, Walter E. Campbell, New Haven, Conn.; secretary, F. L. Thomas, Manchester, Conn.

Idaho Nurserymen's Association—President, Anton Diedricksen, Payette, Idaho; secretary, J. F. Litooy, Boise, Idaho. No definite time has been set for next meeting. Probably in July at Boise, Idaho.

Massachusetts Nurserymen's Association—President, E. W. Breed, Clinton, Mass.; secretary, Winthrop H. Thurlow, West Newbury, Mass.

Mississippi Nurserymen's Association—President, Theodore Bechtel, Ocean Springs, Mississippi; Vice-President, S. W. Crowell, Rose- acres, Mississippi; Sec'y-Treas., R. W. Harned, Agr. College.

National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.

New England Nurserymen's Association—President, Harlan P. Kelley, Salem, Mass.; Secretary, Charles Adams, Springfield, Mass. Annual meeting held on the last Tuesday in February.

New Jersey Association of Nurserymen—President, Carl H. Flemer, Springfield, N. J. Secretary-Treas., A. F. Meisky, Elizabeth, N. J.

New York State Nurserymen's Association—President, E. S. Osborne, Rochester, N. Y.; secretary, H. B. Phillips, Rochester, New York. Next meeting September. Probably at Utica.

Ohio Nurserymen's Association—President, T. J. Dinsmore, Troy, Ohio; secretary, W. B. Cole, Painesville, Ohio.

Oregon—Washington Association of Nurserymen—President, C. F. Breilhaupt, Richland, Wash.; secretary, C. A. Tonneson, Tacoma, Wash.

Pacific Coast Association of Nurserymen—President S. C. Miller, Milton, Oregon; secretary-treasurer, C. A. Tonneson, Tacoma, Wash. Place of next meeting to be decided later.

Pennsylvania Nurserymen's Association—President William Warner Harper, Philadelphia. Secretary, Henry T. Moon, Morrisville, Pa.

Southern Nurserymen's Association—President, Harry Nicholson, Winchester, Tenn.; secretary-treasurer, O. Joe Howard, Pomona, N. Carolina.

Tennessee Nurserymen's Association—President, A. I. Smith, Knoxville, Tenn.; secretary-treasurer, G. M. Bentley, Knoxville, Tenn.

Tennessee State Florists' Association—President, Karl P. Baum, Knoxville, Tenn.; secretary-treasurer, G. M. Bentley, Knoxville, Tenn.

Texas Nurserymen's Association—President, William B. Munson, Denison, Texas; secretary-treasurer, J. M. Ramsey, Austin, Texas.

Western Association of Nurserymen—President, Lloyd C. Stark, Louisiana, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

Princeton Nurseries

Princeton Nurseries is a bold conception carried out by experienced nurserymen.

It is an interesting plant, because it is different. Planned with faith in the future right from the start.

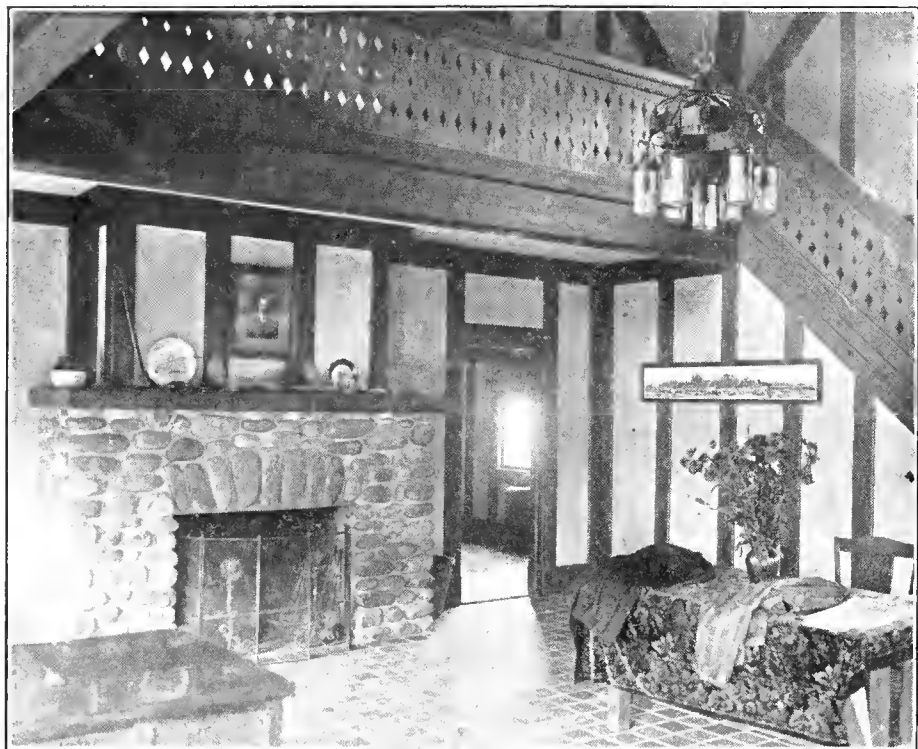
Starting with 265 acres, 175 of which are already planted. Office buildings and equipment all planned with the idea that needs of the business will require them in the future.

The office building is artistic and comfortable, yet Princeton Nurseries are only catering to the wholesale trade. The woodwork in the office is mahogany, and you will notice the photograph shows it to be dotted here and there; those are worm holes. This African mahogany when floated down to tide water was left in the river over long; the worms got in it and spoiled it. It isn't an article in general commerce, but it is odd and very attractive; and you will notice in the same photograph that the desks, tables and chairs are all made of

into the cars and under cover. The cellar will be electrically lighted and they have their own water system. On the place, there are six first-rate houses for employees. They expect to put up several others so as to have the employees right on the place.

The proprietors of Princeton Nurseries have high ideals and are developing their grounds along educational and artistic lines. The office grounds as well as both sides of the highway passing through the nurseries are being landscaped which will give the opportunity of growing plants to maturity, giving the employees an opportunity to become familiar with plants in all stages of growth.

Mr. Martin H. Musser, Route No. 4, Lancaster, Pa., has written to The National Nurseryman stating that he is not growing any nursery stock at present, having retired from this business and taken up general farming.

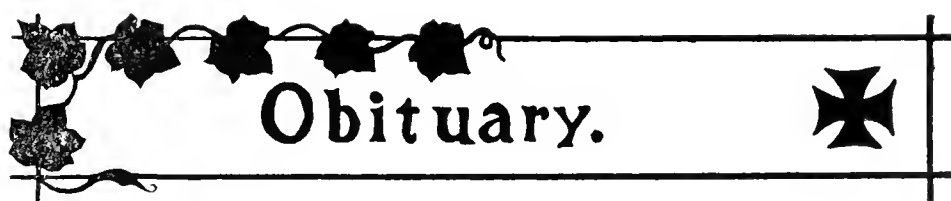


Princeton Nurseries Office, Entrance Hall—Notice the fire-place with President Wilson's picture above.

the same material. Notice the fire-place, with President Wilson's picture above it. There are two large fire-places in the office; of course, the building is steam heated, but fireplaces make the things look more home-like. The reception hall, shown in the picture will be furnished with big rocking chairs. The supports under the windows are for the window boxes which haven't been put up yet. Notice that entrance. In the rear of the office and in the same building is the garage with room for two large cars.

Connected storage cellar and packing house are being built, one 100x60 feet, the other 100x40 feet, only a few steps from the office.

Side track has just been laid on the grounds and the packing house immediately adjoins it. The building is so arranged that this switch runs right into the packing house, and they will be able to load all shipments directly



MRS. CATHARINE E. MEEHAN.

Mrs. Catharine E. Meehan, widow of Thomas Meehan, died at her home in Germantown, Philadelphia, on Wednesday, August 21st, at the age of 83.

Thomas Meehan was the founder of the nurseries of Thomas Meehan & Sons, Germantown, Philadelphia.

Mrs. Meehan is survived by three sons, William E., Superintendent of the Fairmount Park Aquarium, Philadelphia; Thomas B. Meehan, of Thomas B. Meehan & Company, Dresher, Penna.; J. Franklin and S. Mendelson, of the firm of Thomas Meehan & Sons, Germantown; and two daughters, Mrs. Sarah D. Lanning and Mrs. John P. Burn.

CORNUS CONTROVERSA. This handsome Cornel, like the native *Cornus alternifolia*, has alternate leaves and wide-spreading branches, but the flower-clusters are broader; it blooms here a week or ten days earlier, and it is a much larger tree, as Wilson saw specimens in western China fully sixty feet high. It is a native of the Himalayan Mountains, western China and of Japan. The plants raised from the seeds collected by Wilson in China have proved perfectly hardy in the Arboretum where they are growing vigorously and are now in bloom in the supplementary Cornel collection in the rear of the Phello-dendron Group on the right-hand side of the Meadow Road. The largest plant in the Arboretum and probably the largest in the United States is also in flower in the nursery near the top of Peter's Hill. This Cornel gives every promise of being a valuable ornamental tree in this climate.

The Pennsylvania Railroad System Adapts A New System of Handling Freight in Less than Carload Lots

PLANS which are now being worked out in final detail, and will shortly be put into actual operation, will effect a complete change in the methods of receiving, loading and forwarding less than carload freight, of all descriptions, upon all portions of the Pennsylvania Railroad Lines East of Pittsburgh.

The new arrangements will constitute probably the most far-reaching improvement that has ever been attempted, on a large scale, in freight transportation practices. The present custom of receiving less than carload freight indiscriminately, at all stations, at any time of the day, for all destinations, which has been followed since the early days of railroading, will be abolished. In its place there will be substituted a carefully devised plan whereby the acceptance and loading of freight, in less than carload lots, will be conducted according to a regularly established system, and such freight will be automatically concentrated into full loads at the point of shipment.

The two most important features of the new plan for handling less than carload freight are:

1. The inauguration of shipping days—or substantially “sailing dates”—on which cars will depart from various points of origin to specified destinations; freight will be accepted on the proper shipping days, only, and the cars will “sail” as specified.

2. The designation of particular stations at which freight will be exclusively received for specified destinations; freight for such points will be accepted at the stations named only.

The new plan represents the results of prolonged investigation, conducted by the Transportation and Traffic Officers of the Pennsylvania Railroad, for the purpose of determining the best practical means of obtaining increased efficiency and despatch in the handling of less than carload freight.

The primary purposes for the adoption of the new method are four-fold:

First. Elimination of the delay incident to the re-handling of freight, under the present methods of consolidating small shipments into full carloads at transfer stations; this will give the shipper quicker service than is possible under the old method.

Second. Conservation of car supply by effecting better average loading than is possible under the transfer system; this will increase the cars available for commercial freight, as well as Government supplies.

Third. Reduction in the number of car and train movements required to transport a given volume of freight; this will increase the capacity of the whole Railroad plant, and will release trackage and locomotives for the movement of troops, Government supplies and commercial freight.

Fourth. Improvement in the regularity of the freight

service by systematizing and simplifying operation; this will result from the elimination of a large proportion of the complicated re-handling of freight, which is now unavoidable, with the attendant liability to damage.

It is the belief of the Management of the Railroad that the proposed change will increase the efficiency, promptness and regularity of the freight service, and therefore will commend itself to shippers as facilitating the conduct of their business.

Under the present method of handling less than carload freight, a shipper having a small consignment to transport from City “A” to City “B” can take his goods to any freight station in City “A,” at any time during the ordinary working hours. In the course of the day, or perhaps the next two or three days, the freight will be loaded into a car and run out to a transfer station, which may be a few miles or more than 100 miles distant. There it will be unloaded and trucked into another car, in which numerous small shipments, from many other points, for City “B,” are being consolidated in the effort to make up a full car.

Under the proposed plan, there will be certain days on which less than carload freight for City “B” will be accepted at one or more specified stations in City “A,” and such freight will be accepted only on the days, and at the particular station, or stations, named. On the days specified, a car for City “B” will leave the originating station or stations. The service will be daily, tri-weekly, semi-weekly or weekly according to the average volume of the traffic, and freight for City “B” will be taken only in such cars. Under this method there will be no subsequent transferring or re-handling of the freight, and the car will move straight through to City “B,” without breaking bulk.

In large cities, where a number of freight stations are maintained, traffic to the various principal destinations will be apportioned between the stations. For example, where conditions permit, very large shipping centers will be subdivided into zones, each embracing several freight stations. From each zone service will be given on specified days to a number of destinations. In such cases, cars for various points will be alternated between the stations in a given zone. If, for instance, a certain zone, containing several freight stations, is to have three cars a week to a certain destination, the car may leave Station “A” on Monday, Station “B” on Wednesday and Station “C” on Saturday. This will equalize drayage distance between shippers in various portions of the zone.

To eliminate the congestion of trucks and teams occurring at nearly all large freight stations in the afternoon, the “sailing hours” of cars for certain destinations will be made earlier than the general closing time of the station. To illustrate—at a station from which several regular cars are operated daily, to sundry destinations, the

"sailing time" for the cars to City "B" and City "C" may be fixed at noon, and for City "D" and City "E" at 1 o'clock P. M., while freight for other points may be accepted up to the closing hour.

This will require the delivery of a considerable quantity of freight in the morning hours of the "sailing day." The result will be to distribute the receipts throughout the day, extend the capacity of the station and facilitate the movement of traffic. Shippers will be benefited, as their teams and trucks will not be forced to stand idle for several hours before being able to get to the platform, as is often the case under the present conditions.

The application of the plan at smaller stations—those at which less than carload freight would not accumulate into carloads with sufficient frequency to operate through cars to any given point—will be limited to the establishment of shipping days.

It is the intention to continue sufficient local "pick-up" freight service to meet the requirements for that form of service.

One important result which the plan is expected to bring about will be a reduction in loss and damage to freight, owing to the greater promptness with which it will be loaded and dispatched.

The simplification of railroad operation, as well as the elimination of re-handling of less than carload freight at transfer stations, will also diminish the amount of freight going astray.

The proposed plan is being worked out on scientific lines. A most careful and elaborate study has been made of the movement of less than carload freight to and from all points on the entire railroad and its connections, and the nature and frequency of service to be afforded at each station will be based upon that study. Future changes in the current of traffic will be taken care of promptly, as they become evident.

A conservative estimate shows that the adoption of the proposed plan will result in the saving of at least 1,000 box cars per day in the handling of less than carload freight on the lines East of Pittsburgh and Erie.

The new plan will be put into effect first in the Philadelphia District, where it will become operative in the near future. As soon thereafter as possible it will be applied at New York, Baltimore, Pittsburgh and Buffalo, following which it will be inaugurated at all stations.

When making the new plan effective in any locality, it will be explained, as to its purpose and method of operation, to the local Board of Trade, Chamber of Commerce and other trade bodies. This duty will be performed personally by the various Division Freight Agents.

The working out of details for the various stations, will be completed, on each Grand Division, under the joint direction of Mr. H. C. Bixler, Superintendent of Stations and Transfers of the Pennsylvania Railroad, and the proper Division Freight Agent, representing respectively, the Transportation and Traffic Departments. They will be assisted in this work by the Staffs of the Division Superintendents.

LEAD ARSENATES, STONE FRUITS, AND THE WEATHER

By George P. Gray.

THE appearance of an unusual number of canker worms in the prune and apricot orchards of the Santa Clara Valley (Cal.) in the spring of 1915 caused a great many of the orchardists of that section to make one or two sprayings of lead arsenate in order to prevent defoliation of the trees. The worms were well controlled within a short time, but some two or three weeks after the application of the poison, it was noticed that the trees began shedding their foliage. The injured leaves were specked with brown spots, each speck being dead leaf tissue. Some of the fruit was also injured in the same way. The defoliation in some of the orchards amounted to perhaps 50 per cent. while in others the injury was not as serious. Defoliation and fruit dropping was quite general, however, wherever lead arsenate had been applied for the canker worms.

It so happened that practically all of the lead arsenate used on prunes and apricots in the vicinity was purchased from a single firm. Some of the orchardists had never before been obliged to use an arsenical and so the use of arsenicals in general was condemned. Others thought that they had been supplied with a poor grade of arsenical, and threatened law-suits. The office of the County Horticultural Commissioner was besieged with inquiries as to the cause of the trouble. The situation was so unusual that the Commissioner (Mr. E. L. Morris) called upon the Insecticide and Fungicide Laboratory of the Agricultural Experiment Station for assistance in the solution of the problem. The writer made two trips to the valley and spent several days in company with Mr. Morris visiting the injured orchards, interviewing the owners and securing data upon which to base conclusions. Five samples of lead arsenate were secured from different orchards which had suffered from spray injury. The matter was gone over quite carefully with Mr. Morris; representatives of two important manufacturers of lead arsenate were interviewed; and the samples were examined by the writer. As a result of the investigation, certain conclusions have been made and will be submitted later on in the paper.

In order that the discussion of the case may be better understood, it seems well to present some theories of spray injury, to describe the commercial types of lead arsenate, and to point out the recognized susceptibility of stone fruits to spray injury.

THEORY OF SPRAY INJURY

For injury to result from the application of a spray, it is necessary that the material be absorbed in some way. It seems quite essential that the material should be in solution before absorption can take place. At least, there is no evidence that a solid can enter the tissue of plants or animals to cause lesions of any sort. The modern practice of applying arsenicals to foliage is based upon the proper combination of the poison in a form which is insoluble in water in order to prevent its entering plant tissue and causing damage. It is generally recognized that the damage which is sometimes caused by arsenicals

is due to the part of the arsenical which is soluble in water and which may thus enter the tissue of the plant to disturb its functions.

Arsenic has been combined with many substances to find a combination which is the least soluble and the least affected by weather conditions, and to find a combination that is the most suitable for use in other ways. Of all the combinations thus far tried, a chemical combination of arsenic with lead seems to most fully meet the above conditions. At present, there are two types of lead arsenate upon the market, each having its own place in spray practice.

TYPES OF COMMERCIAL LEAD ARSENATE

ACID LEAD ARSENATE; LEAD HYDROGEN ARSENATE (OFTEN LABELED "STANDARD").—In an investigation to find the most suitable form in which an arsenical could be applied to foliage, Mr. F. C. Moulton, chemist for the Massachusetts Gypsy Moth Commission, selected lead arsenate as the combination most suitable for use in his work. This arsenical offered so many advantages over other arsenicals in use previous to his work, that it is rapidly supplanting all other forms of arsenicals for use on foliage. This arsenical may be prepared by mixing in proper proportions a soluble salt of lead, usually lead nitrate or lead acetate, and a soluble salt of arsenic acid, usually sodium arsenate. The process has been perfected and cheapened by commercial manufacturers so that the use of these soluble salts, as raw materials, has been largely discontinued. At present, many of the manufacturers prepare commercial lead arsenate paste from lead oxide (litharge) and arsenic acid. This process greatly cheapens and simplifies the manufacture of the paste in ways which need not be discussed in this paper. As ordinarily made, there results a compound which may be spoken of in chemical language as an acid lead arsenate or possibly a mixture of this and neutral or basic lead arsenate. It was found that lead arsenate produced in this way gave very uniform and satisfactory results in most cases for the control of leaf-eating insects.

BASIC LEAD ARSENATE (USUALLY LABELED "TRIPLUMBIC" OR "NEUTRAL").—The lead arsenate produced in the usual way, however, was found to produce very serious foliage injury under certain climatic conditions which prevail in the Pajaro Valley, the principal apple growing section of California. In the spring of 1903, field and laboratory work was commenced by the Entomological Division of the University of California to find a more suitable arsenical or to modify the known methods of preparation of lead arsenate so that it could be used without injury under the conditions prevailing in the valley. The field work was conducted by Mr. W. H. Volek and Mr. E. E. Luther, students in the College of Agriculture. After numerous experiments, the process of preparation was so modified that a new type of lead arsenate was produced which could be used with safety upon the apple trees in that section. The modified process and some theories of foliage injury are discussed in the publication previously referred to. This new process lead arsenate was at first believed to be what may be termed a neutral lead arsenate. Our knowledge of the chemistry of lead arsenates is still very imperfect, but later investigations seem to indicate that the material produced

in the manner described by Volek may more properly be referred to as basic lead arsenate.

COMPARISON OF THE TWO TYPES.—To take up a full discussion of the composition of the two types mentioned would be of too technical a nature for presentation in a paper of this kind. The acid type is very susceptible to the action of other chemicals and is more or less dissolved by chemicals of an alkaline nature which are commonly found in many spray materials. This property distinguishes the acid type of lead arsenate from the basic. The latter is not easily affected by alkaline chemicals and is a much more stable chemical compound under neutral or alkaline conditions. It is not easily made soluble by ordinary influences. A theory was advanced by Volek that the acid type of lead arsenate was decomposed by the small amounts of ammonia (alkaline) which are sometimes present in the atmosphere, producing a soluble form of arsenic. Under the conditions prevailing in the Pajaro Valley, there was present on the foliage enough moisture to dissolve the soluble arsenic, thus formed, and make possible its absorption by the foliage. The basic lead arsenate, on the other hand, is absolutely insoluble in ammonia and soluble arsenic cannot be formed in this manner. Whether this theory is correct or not has not been fully confirmed by other experimenters, but the fact remains, however, that the basic type is the safer arsenical to use upon foliage in the humid coast regions. The basic type is practically the only arsenical which may be safely mixed with any of the other spray materials as a combination spray. This has been fully tested out in the Insecticide and Fungicide Laboratory and has been found to be much more suitable when alkalies of any sort are mixed with it. The acid type is a stronger poison, however, and its action upon the insects is much more rapid. The basic type contains much less arsenic to the pound and a much longer time is required to poison insects.

The stronger and quicker acting acid lead arsenate is therefore the one to be naturally selected for use upon foliage which is not peculiarly susceptible to spray injury and where weather conditions are not apt to cause its decomposition, that is, in the more arid regions away from the coast. The basic type should be used whenever an arsenical is to be mixed with any other material (with one or two exceptions) as a combination spray. The *basic type* is the one to be recommended for use in the humid coast regions and upon *all stone fruits* or any others which are especially susceptible to spray injury.

SUSCEPTIBILITY OF STONE FRUITS TO SPRAY INJURY

It is a well-known fact that the foliage of all stone fruits is peculiarly susceptible to injury from many kinds of sprays. This fact has been noted in respect to the use of arsenicals and the California Agricultural Experiment Station has advised that the basic type of lead arsenate should be the only arsenical applied to stone fruits. The wisdom of this advice has been doubted by a great many and the cause of the doubt is not difficult to find. If the weather is favorable, the acid type of lead arsenate usually may be applied with impunity. In fact, this has been done in the Santa Clara Valley for a number of years with only occasional bad effects. This year, however (1915), has shown that this procedure is not a safe one and some other way must be chosen if the growers

do not wish to take the consequences of defoliation and fruit drop due to the effect of unfavorable weather conditions upon acid lead arsenate.

The weather conditions that are believed to favor the decomposition of acid lead arsenate are a succession of light rains extending over a period of several days, continual foggy or damp "muggy" weather, and more or less warmth. A heavy rain is not as serious as a mist, for if there is a decomposition of the arsenate, a rain sufficient to drip from the leaves may wash off the soluble arsenic before its absorption.

WEATHER RECORD FOR THE PERIOD OF SPRAY INJURY

The following weather record covering the period of spray injury has been kindly furnished by Mr. W. H. Ward of Morgan Hill, Cal., who was one of the orchardists to suffer quite seriously from spray injury.

The rain records are taken in the morning about 7 a. m. and are as follows:

April 20 .....	.66 inch
April 26 .....	.27 inch
April 27 .....	.14 inch
April 28 .....	.11 inch
April 29 .....	.11 inch
May 1 .....	.11 inch
May 3 .....	.38 inch
May 4 .....	.97 inch
May 9 .....	.20 inch
May 10 .....	.22 inch
May 11 .....	.16 inch
May 13 .....	.18 inch
May 16 .....	.31 inch
May 23 .....	.07 inch

The spraying was done on the Ward ranch on April 19 and on the afternoon of April 20. The weather was damp when the spraying was done the first day and it rained the night following. The spraying was finished the next afternoon.

The amount of acid lead arsenate used was from $\frac{1}{4}$ to $4\frac{1}{4}$ lbs. to 100 gallons of water. This was about the amount used by the other growers. The injury was noticed about two weeks after the application of the spray.

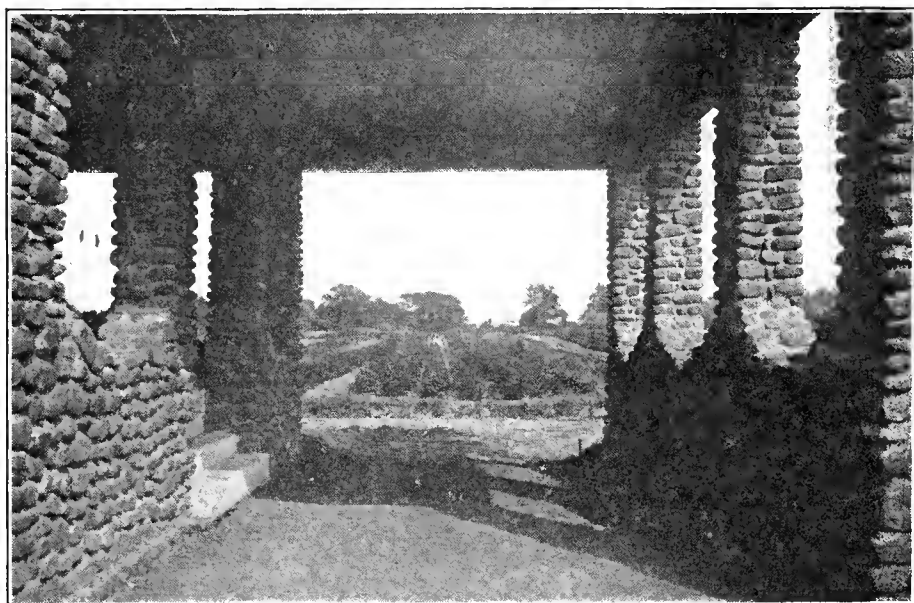
THEORIES CONFIRMED BY THE INVESTIGATION

As previously noted, five samples of lead arsenate paste were collected during the progress of the investigation. These samples were taken from parts of kegs of the paste which were said to have been left over from the previous sprayings which had caused the injury. The labels were in some cases obscure, but from the information gathered from the labels, from statements by the growers and by the dealer supplying the arsenicals, it seems that the five samples represented at least three different brands of lead arsenate. Examination revealed the fact that they were all of the acid type. None of them contained an unusual or dangerous amount of soluble arsenic. In fact, one of the samples showed only a trace of soluble arsenic. The samples were in all respects normal as far as could be determined. Furthermore, the samples representing three different brands, it seems improbable that all three of the companies should happen to produce a poor grade of material at the same time.

The orchard of Mr. August Nielson in the Evergreen district near San Jose was visited, which consisted prin-

cipally of apricots. There were, however, three rows of apple trees running across this orchard. The whole orchard was sprayed with acid lead arsenate on April 13. Five pounds of lead arsenate were used to the 100 gallons. Foliage injury and dropping of leaves and fruit was noticed before the first of May following. The whole orchard was uniformly sprayed with the strength of arsenical given above. It was noticed that spray injury occurred on the foliage of all of the apricot trees while no injury could be detected upon the foliage of the apple trees. The point brought out by the above observation is that the stone fruits only were injured, that the apple trees were uninjured, and that the lead arsenate used could not be considered of poor grade.

The adjacent orchard of Mr. R. Chaboya was also visited. This orchard consisted almost entirely of prune trees. Only a part of the trees in this orchard were sprayed, some of which were sprayed twice and some once. It was observed that the most defoliation resulted where two sprayings had been made. Wherever the trees had been sprayed, foliage injury was apparent. No foliage injury was observed upon the trees which had



Princeton Nurseries through the portecochere

not been sprayed. This observation, as well as similar observations on other orchards, leaves no room for doubt that the injury had been caused by the spray.

Observations were also made on a prune orchard owned by Mr. F. J. Shepherd, Edenvale. Only a part of the trees had been sprayed. Those sprayed uniformly showed injury, while those not sprayed showed no injury. This observation confirmed the above. Many other orchards were visited. To record the observations made would largely be a repetition of the above. It was noticed, however, in this connection that occasionally a pear or an apple tree had been sprayed with the arsenical and in no instance could injury be detected, while in every case where stone fruits had been sprayed, with acid lead arsenate, more or less injury was apparent.

SUMMARY

According to the observations made of stone fruits to which acid lead arsenate had been applied during the month of April, 1915, they showed injury to a greater or

less extent. Pome fruits which were sprayed under the same conditions causing the injury as above noted showed no injury. Examination of five samples of lead arsenate collected during the investigation represented three different brands. In no case did the analysis reveal the presence of unusual quantities of water-soluble arsenic. The samples were all good grades of acid lead arsenate. According to weather records and to the testimonies of the growers, a period of damp, misty weather prevailed during and after the application of the lead arsenate causing the spray injury. It seems reasonable to conclude:

1. The acid type of lead arsenate, often labeled "standard," is unsafe to use on the foliage of stone fruits except under favorable weather conditions.

2. According to weather reports, it appears that during the spring of this year (1915) (particularly during the month of April) unusually unfavorable weather conditions prevailed in the Santa Clara Valley, Cal.

3. The foliage injury in the orchards of the Santa Clara Valley this spring was due to the decomposition of acid lead arsenate by the weather.

4. According to previous experience and in accordance with previous recommendations of the University, the basic type of lead arsenate (usually labeled "tri-plumbic" or "neutral") is a safer arsenical to use on stone fruits and is not decomposed by unfavorable weather conditions.

This is a slower acting poison, however, than the acid type and would not be as effective unless applied when the canker worms are very young.

RECOMMENDATIONS

In looking up the recommendations of entomologists and taking into consideration the experiences previously noted, it appears that there is a choice of three procedures for the control of canker worms:

1. Banding of trees has been found to give satisfactory results. Essig may be cited as authority for recommending "tree tanglefoot" for the control of both spring and fall canker worms.

2. The acid type of lead arsenate may be successfully used on stone fruits for the control of canker worms *provided the weather conditions are favorable*. It is *not recommended*, however, for general practice as there can be no guarantee of what the weather may be after the application of the arsenical.

3. It is *very strongly recommended*, when necessary to use an arsenical upon stone fruits, that the *basic type of lead arsenate be used exclusively*. In order that this slower acting poison may be effective, it will be necessary to keep a close watch of the orchards and make the application while the worms are very young.—*Journal of Economic Entomology*.

Notes from the Arnold Arboretum

SUMMER FLOWERING TREES

Several trees flower in summer here and add to the interest of the Arboretum at a season of the year when there are comparatively few flowers or ripe fruits to be seen. The most important of these trees are the Lindens, a genus of many species, the earliest of which begins to bloom about the middle of June and the last five or six weeks later. Lindens grow best in damp, moist, well-drained soil, and the European species take more kindly to cultivation in this part of the country than the American or Asiatic species, the handsomest Linden trees planted in the neighborhood of Boston being forms of the neutral European hybrid to which the name *Tilia vulgaris* belongs. There is a large collection of Lindens in the Arboretum arranged in the meadow on the right-hand side of the Meadow Road in which can now be seen specimens of most of the species and of several forms and varieties, many of the trees being now large enough to flower. The fact that, with the exception of *Tilia japonica* which is the first Linden here to unfold its leaves, none of the Asiatic Lindens now promise to be large or useful trees in this climate is surprising for the trees of eastern Asia usually flourish here, and as a rule are better able to adapt themselves to New England conditions than allied European trees. It is always possible, however, that by crossing some of the Asiatic species with the European species new and valuable

forms may be obtained, for hybrids between American and European Lindens, like *Tilia spectabilis* and its variety *Moltkei*, are trees of great beauty and remarkable rapidity of growth.

SOPHORA JAPONICA is in spite of its name a Chinese tree which has been cultivated in Japan for more than a thousand years, and as it first reached Europe from that country was long considered a native of Japan. It is a round-headed tree which in Peking, where it has been much planted, has grown to a large size and looks from a distance like an Oak-tree. The leaves and branchlets are dark green, and the small, creamy white, pea-shaped flowers, which open here in August, are produced in great numbers in narrow, erect, terminal clusters. There are also in the collection the form with long pendent branches (var. *pendula*) which rarely flowers, and a young plant of the form with erect branches (var. *pyramidalis*). The form of this tree with flowers tinged with rose color (var. *rosea*) is not in the Arboretum. The Sophoras are on the right-hand side of the Bussey Hill Road, opposite the upper end of the Lilac Group. Near them the Maaekias are growing. They also belong to the Pea Family, and the better known *Maackia amurensis* is a native of eastern Siberia; it is a small tree with handsome smooth, reddish brown, shining bark, dull, deep green, pinnate leaves and short, narrow, erect spikes of small white flowers which open here soon after the middle of July. There is a form of this tree (var. *Buergeri* in northern

Japan which differs from the Siberian tree in the presence of soft down on the lower surface of the leaflets. The species discovered by Wilson in central China, *M. hupehensis*, is growing well in the Arboretum but has not yet flowered.

OXYDENDRUM ARBOREUM, the Sorrel-tree or Sour Wood, is a native of the southern Appalachian mountain forests and the only tree of the Heath Family which can be grown in this climate, with the exception of the Laurel (*Kalmia latifolia*) and the Rose Bay (*Rhododendron maximum*) which are shrubs at the north and only exceptionally trees in a few favored valleys of the southern mountains. The Sorrel-tree in its native forests grows fifty or sixty feet high, but at the north as it begins to flower abundantly when only a few feet tall, it is not probable that in this climate it will ever attain a considerable size. It is well worth growing, however, for its bright green shining leaves which have a pleasant acidulous flavor and in autumn turn bright scarlet, for its white Andromeda-like flowers erect on the branches of spreading or slightly drooping terminal clusters, and for its pale fruits which in the autumn are conspicuous among the brilliant leaves.

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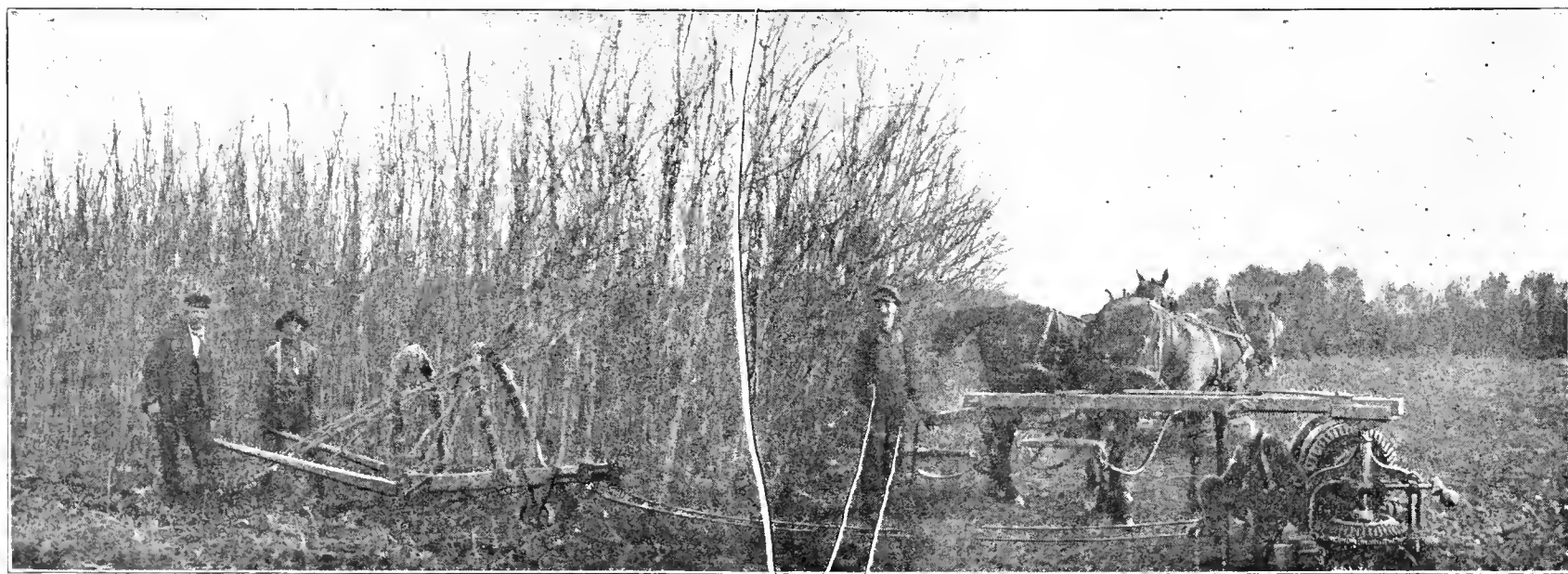
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As I want to retire from business, I will sell besides the land, all nursery stock and implements. This nursery is located in the Northwest in one of the best business localities of this country. Address:

Z. W. S., Care "The National Nurseryman."

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The McFarland Publicity Service
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For Fall 1917

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Shade Trees, Shrubs, Evergreens

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Apples, 2 year buds.
Apples, 4, 5, and 6 years old.

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Largest and finest stock of California Privet of any nursery in the world.

POLISH OR IRONCLAD PRIVET
AMOR OR RUSSIAN PRIVET
BERBERIS THUNBERGII

Very attractive prices on carload lots.

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The original growers of California Privet as a hedge plant.

EXTRA FINE

1 Year Fruit Trees

CHERRIES, PLUMS, APPLES, PEARS AND DWARF APPLES.

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400 ROSES

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If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine PROGRESSIVE Everbearing plants, guaranteed to be TRUE TO NAME and handled so as to reach you in best of growing condition. Write for prices.

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1917 CROP PEACH SEED.

The best we can figure, there will be about 25 to 30% of
 the 1915 crop. We hope there will be enough to go
 around, but cannot guarantee it. We always have been
 able to fill our orders and hope to be able to do so this
 year. You are going to plant seed, and we advise that you
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Seeds For Nurserymen

Now is the time to take up with me,—your 1917 require-
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Conifers, Shade and Ornamental Trees **INVITED**

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Owing to increased cost of production and general shortage, prices in many lines are likely to advance, but we are booking orders for Oregon Champion Gooseberry and Perfection Currant for fall delivery at last season's prices.

"Now is the accepted time" to place your orders.

A Large Stock of Apple, Pear, Cherry and Peach Grape Vines, Blackberry and Raspberry Plants

And a general line of ORNAMENTAL TREES and SHRUBS. All stock clean and thrifty, the best that can be grown.

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We will have a heavy stock of Peach Trees and Norway Spruces on which we can quote attractive prices.

We expect to be in position to offer Natural Peach Seed, crop of 1917. Send us your list for quotations.

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Azalea mollis, Rustica & Ghent in all the leading varieties, grown from layers not grafted.

Manetti Stocks clean and well rooted for grafting or open ground.

Standard, Climbing, Weeping and Dwarf Roses in great variety Rhododendrons, the cream of the Hardy American varieties.

Andromeda floribunda, japonica, and speciosa, bushy budded plants.

Kalmia latifolia.

Green and River's Purple Beech in all sizes up to 12 feet.

Prices and full particulars on application.

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Raspberry Plants

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Millions of Strawberry Plants for Spring Delivery

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Prices as low as First-Class Work and Unequalled Promptness in

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We are now Ready to Book Orders for Harrison Grown Trees

FOR EARLY FALL DELIVERY

If you do not find what you are looking for in the list below, write or telegraph us and we will be glad to send complete list of our offerings.

PEACH—1-year Budded

1 in. up 7-8 ft.	¾ in. 6-7 ft.	9-16 in. 5-6 ft.	½ in. 4-5 ft.	7-16 in. 3-4 ft.	5-16 in. 2-3 ft.
300	Alexander,	8,000	Krummeil,		
200	Alton,	3,000	Late Crawford,		
5,000	Beer Smock,	1,000	Lemon Free,		
40,000	Belle of Georgia,	400	Levy's Late,		
2,000	Bilyeu's October,	250	Lorentz,		
2,500	Brackett,	1,500	Manie Ross,		
20,000	Carman,	1,750	Matthew's Beauty,		
1,500	Chair's Choice,	3,000	Mayflower,		
12,000	Champion,	300	McCallister,		
300	Denton,	800	Miss Lola,		
200	Dewey, (Ad. Dewey)	250	Moore's Favorite,		
2,000	Early Crawford,	2,000	Mountain Rose,		
200	Early Elberta,	800	New Prolific,		
500	Easton Cling,	1,500	Niagara		
1,200	Ede, (Capt. Ede)	2,000	Old Mixon Free,		
2,000	Edmont Beauty,	12,500	Ray,		
60,000	Elberta,	2,000	Red Bird Cling,		
2,000	Engle's Mammoth	1,500	Reeves's Favorite,		
2,000	Fitzgerald,	2,000	Ringgold (Wilkin's Cling)		
2,000	Ford's Late White,				
1,500	Foster,	3,500	St. John, (Yellow)		
5,000	Fox Seedling,	7,000	Salway,		
3,000	Francis,	5,000	Slappey,		
2,000	Geary's Hold-On,	2,000	Steven's Rare Ripe,		
10,000	Greensboro,	1,000	Stump		
2,000	Harrison Cling,	1,500	Uneeda or Gordon		
3,000	Heath, (White H. Cling)	1,200	Waddell		
		1,200	Walker		
10,000	Hiley, (Early Belle)	200	Weaver,		
5,000	Iron Mountain,	1,000	Willett,		
2,000	Kalamazoo,	1,000	Wonderful,		

APPLE—1-year Budded

5-8 in.	½ in.	3-8 in.	5-6 ft.	4-5 ft.	3-4 ft.
200	Alexander,	100	Opalescent,		
2,000	Baldwin,	1,000	Paragon, (M. B. Twig)		
2,000	Ben Davis,				
200	Bonum,	500	Rambo, (Summer)		
300	Bullock, (A. G. Russett)	400	Rambo, (Winter)		
		1,000	Red Astrachan,		
100	Chenango,	100	Red June, (Car. Red)		
12,500	Delicious,	2,000	R. I. Greening,		
1,000	Early Harvest,	2,000	Rome Beauty,		
300	Faliawater,	600	Smokehouse,		
2,000	Fameuse,	200	Spitzenburg,		
1,000	Gano,	400	Stark,		
3,000	Gravenstein,	2,000	Starr,		
7,000	Grimes' Golden,	15,000	Stayman's Wine Sap,		
200	Hubbardston,	400	Sweet Bough,		
500	Hyslop,	700	Thompkins King,		
3,500	Jonathan,	500	Transcendent,		
200	July, (Fourth of July)	700	Wagner,		
200	Lowry,	5,000	Wealthy,		
400	Maiden's Blush,	10,000	William's Early Red,		
8,000	McIntosh,	3,500	Winter Banana,		
300	Nero,	3,500	Winesap		
2,000	Northern Spy,	100	Winter Paradise,		
1,500	Northwestern, (N. W. Greening)	500	Wolf River,		
3,500	Oldenburg, (Duchess of Oldenburg)	8,000	Yellow Newtown,		
		1,200	Yellow Transparent,		
			York Imperial		

APPLE—2-year Budded

3-4 in.	5-8 in.	½ in.	6-7 ft.	5-6 ft.	4-5 ft.
1,000	Ben Davis,	1,000	Northern Spy,		
2,000	Delicious,	1,000	Stark,		
1,000	Fameuse,	1,000	Wealthy,		
4,000	McIntosh,	2,000	Wm. Ely. Red,		
2,000	Paragon, (M. B. Twigg)	1,000	Wolf River,		
8,000	R. I. Greening,	1,000	Winter Banana,		
1,000	Gano,	2,000	Yellow Transparent,		

PEARS—Two Year Budded

3-4 in.	5-8 in.	½ in.	6-7 ft.	5-6 ft.	4-5 ft.
6,000	Bartlett,	500	Clapp's Favorite,		
2,000	Seckel,	500	Garber,		
500	Lawrence,	500	LeConte,		
500	Anjou,				

KEIFFER PEARS—Two Year Budded

3-4 in.	5-8 in.	1-2 in.	6-7 ft.	5-6 ft.	4-5 ft.
		9,000	Keiffer		

CALIFORNIA PRIVET SPRUCE, KOSTER'S BLUE

		Specimen Plants
25,000	6 to 12 in.	
25,000	12 to 18 in.	100 1½ to 2 ft.
25,000	18 to 24 in.	100 2 to 2½ ft.
35,000	2 to 3 ft.	100 2½ to 3 ft.
5,000	3 to 4 ft.	100 3 to 3½ ft.
	(Specimens)	100 3½ to 4 ft.
2,000	3 ft. high, 3 ft. broad	100 4 to 4½ ft.
BARBERRY, THUNBERGII		100 4½ to 5 ft.
20,000	6 to 12 in.	100 5 to 5½ ft.
20,000	12 to 18 in.	100 5½ to 6 ft.
10,000	18 to 24 in.	25 6 to 7 ft.
5,000	2 to 3 ft.	25 7 to 8 ft.
1,000	2½ to 3 ft.	

SPRUCE, NORWAY

HEMLOCK, CANADIAN

Well-formed Specimens

100	1 to 1½ ft.
1,000	1½ to 2 ft.
1,000	2 to 2½ ft.
300	2½ to 3 ft.
200	3 to 3½ ft.
200	3½ to 4 ft.
50	4 to 4½ ft.
50	4½ to 5 ft.
50	5 to 6 ft.

SPRUCE, COLORADO BLUE

Selected Blues—compact

50	2 to 2½ ft.
75	2½ to 3 ft.
100	3 to 3½ ft.
100	3½ to 4 ft.
100	4 to 4½ ft.
100	4½ to 5 ft.
75	5 to 5½ ft.

Spruce, Colorado Green

50	2 to 2½ ft.
100	2½ to 3 ft.
100	3 to 3½ ft.
100	3½ to 4 ft.
190	4 to 4½ ft.
180	4½ to 5 ft.
60	5 to 5½ ft.

MAPLE, NORWAY

5,000	7 to 8 ft., 1 in.
10,000	8 to 10 ft., 1¼ to 1½ in.
15,000	10 to 12 ft., 1½ to 1¾ in.
15,000	12 to 14 ft., 1¾ to 2 in.
10,000	14 to 16 ft., 2 to 2½ in.
10,000	2½ to 3 in.
5,000	3 to 3½ in.
1,000	3½ to 4 in.
300	4 in.

PLANE, ORIENTAL

2,000	6 to 7 ft.
1,000	7 to 8 ft.
1,000	8 to 10 ft., 1¼ in.
1,000	10 to 12 ft., 1½ in.
1,000	12 to 14 ft., 1¾ in.

WANTED—An experienced man for bookkeeper, one who is familiar with nursery work and is capable of taking charge of our bookkeeping department.

Also an experienced man for propagating small evergreens and shrubbery and who has had experience in greenhouse work.

HARRISONS' NURSERIES,
Berlin, J. G. Harrison & Sons, Maryland



THE NATIONAL NURSERYMAN

OCTOBER 1917



Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

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Established 1847.

Offers a Fine Stock of

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Other Ornamental Shrubs,
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Will be pleased to quote on your list of wants

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Our Specialty

A large and complete line of high quality Nursery Stock
for the wholesale trade.

CARLOTS OF

Apple, Cherry, Peach, Green
Ash (*Fraxinus Lanceolata*), Elm American
White, Maple Silver, Sycamore
American, Shrubs in Assortment

Send for trade list and bulletins. Let us quote your wants.

*YOU will undoubtedly agree
that there is a great ad-
vantage in dealing with a firm
who can ALWAYS supply
EVERYTHING you need.*

Therefore



FELIX & DYKHUIS

WHOLESALE NURSERIES

Boskoop, - - Holland

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You Know Us for Quality

We offer the most complete line
in the East.

Heavy on,

APPLES

CALIFORNIA PRIVET

SPIREA VAN HOUTEI

ROSES

ORNAMENTAL SHRUBS

BERBERRY THUNBERGII

HYDRANGEA P. G.

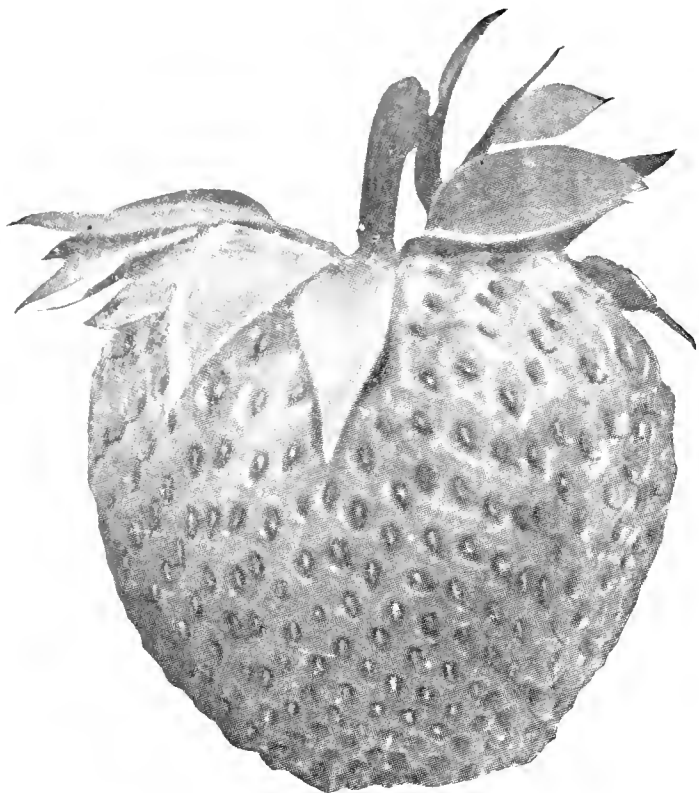
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Pleased to price your list of wants.
Shipping service of the very best.



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Manchester, : Conn.



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FROM NOVEMBER FIRST TO MAY FIRST

We supply leading fruit growers, nurserymen and dealers with fine strawberry plants.

Our plants are healthy, heavily rooted, and guaranteed *true-to-name*.

We grow all the leading standard and everbearing varieties.

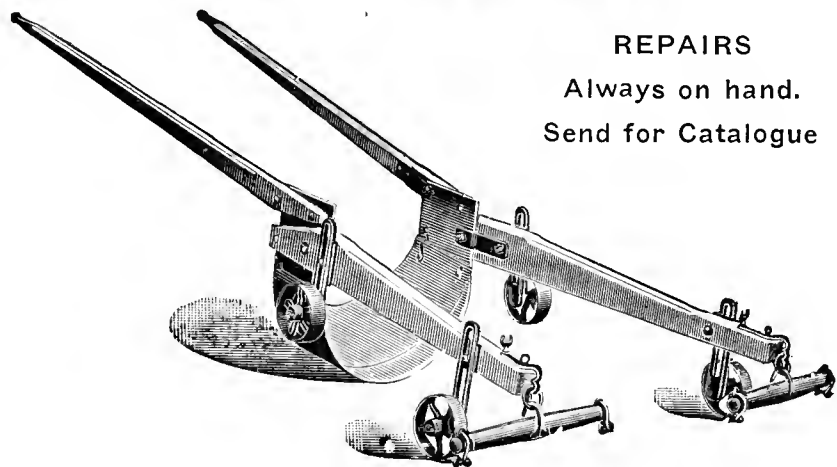
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1917

BRAGG'S COMMON SENSE TREE DIGGER



REPAIRS
Always on hand.
Send for Catalogue

Digger gets All the Roots at the rate of Twenty to Forty Thousand trees per day, and only needs same power as plow.

L. G. BRAGG & CO.
KALAMAZOO, MICH.

FRENCH FRUIT STOCKS

Offered for Account of

VINCENT LEBRETONS NURSERIES
Angers, France

December or February shipment from France

Mahalebs, Myrobolans, Mazzards, Apple, Pear and Quince Stocks, etc. Also a full line of Ornamentals in lining-out sizes

Advance prices now ready for Nurserymen.

HOLLAND STOCK

Norway and Schwedler Maples and other deciduous trees, Tree Roses, Boxwood, Koster Blue Spruce, Rhododendrons, Evergreens, Herbaceous Perennials, etc.

HARDY JAP. LILY BULBS

Such as LILIIUM AURATUM, RUBRUM, ALBUM, MAGNIFICUM, Melpomene, Roseum. Import prices. Case lots.

Fall or Spring Shipment

Write for prices

McHUTCHISON & CO. THE IMPORT HOUSE
95 CHAMBERS ST., NEW YORK

PAINESVILLE NURSERIES



BETTER PEAR TREES THAN OURS, CANNOT BE GROWN

WE HAVE THE GOODS

For over half a century, The PAINESVILLE NURSERIES have been a leading supply house for highest quality stock, in every branch of the nursery business.

ORNAMENTAL TREES, Deciduous and Evergreen, in great variety and largest quantity.
Special: Horse-chestnut, Amer. Chestnut, Catalpa Bungii, Eup. Linden, Norway Maples, Salisburia and Willows.

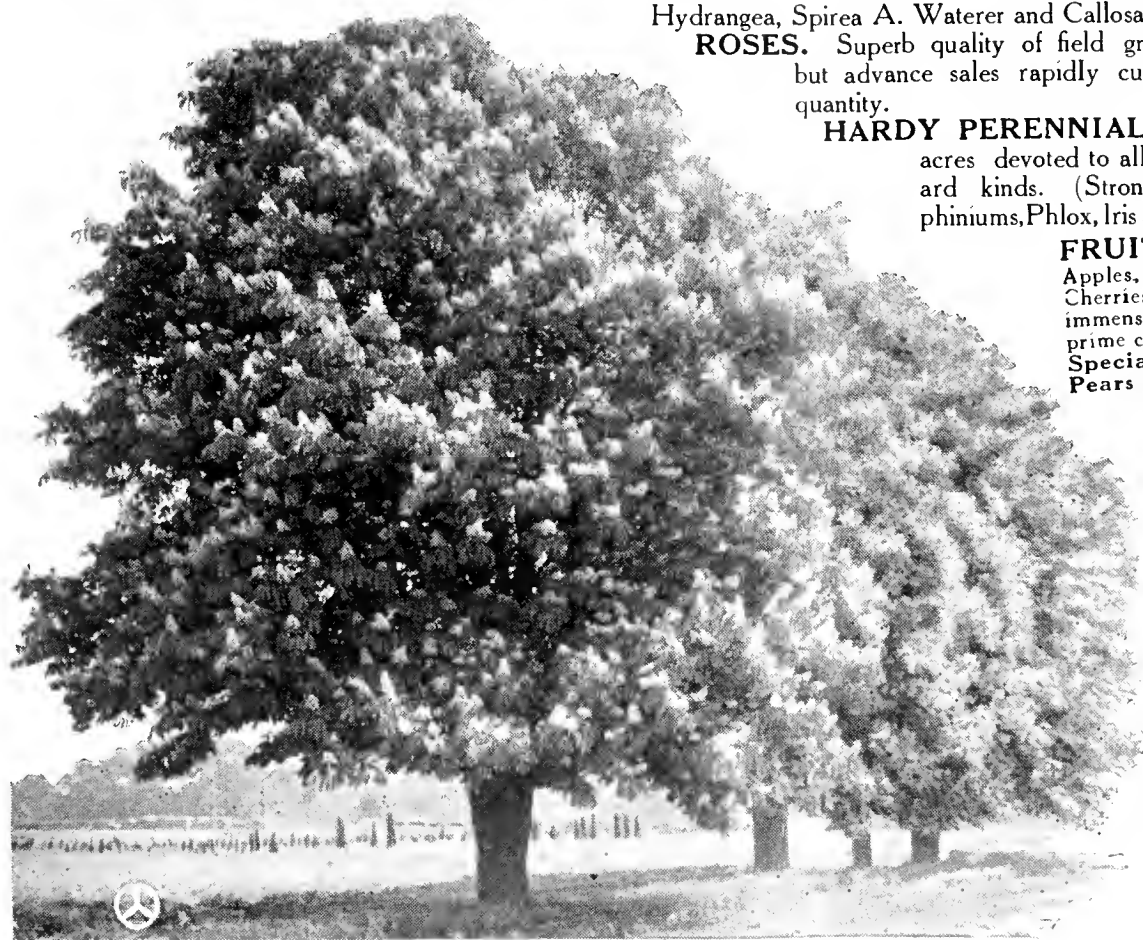
SHRUBS. Full line of all leading types and varieties in use. **Special:** Aralia pentaphylla, Tree Hydrangea, Spirea A. Waterer and Callosa alba.

ROSES. Superb quality of field grown stock; but advance sales rapidly cutting down quantity.

HARDY PERENNIALS. Many acres devoted to all the standard kinds. (Strong on Delphiniums, Phlox, Iris and Peonies.)

FRUIT TREES. Apples, Pears, Plums, Cherries, etc., all in immense blocks and prime condition.
Special supply of Pears and Plums

SMALL FRUITS. Grapes, Currants, Gooseberries, Raspberries, etc.



Sell Horse-chestnuts, they're worthy.



A sample, 3 to 4 feet Tree Hydrangea.

WRITE

for quotations on stock desired for Autumn or Spring trade.

THE STORRS & HARRISON CO.

NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

When writing to Advertisers please mention the National Nurseryman.

J. & P. Preferred Stock.


J. & P. Preferred Stock.

Not How Cheap, But How Good

is our slogan. It is our ambition to grow and sell the best there is in our lines,—because quality goods sell themselves, and at living prices. It isn't necessary to be always cutting under the other fellow.

We grow a pretty complete assortment but our specialties are—

Field-grown Roses	Ampelopsis Veitchii
Clematis, Large-flowering	Clematis Paniculata
Tree-form Hydrangeas	Tree-form Lilacs
Shrubs	Perennial Plants
Paeonias	Shade Trees

 Note: We sell to the trade only. Have no retail business of our own. Our trade customers get and are entitled to our very best stock and very best attention.

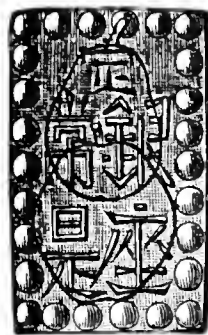
Jackson & Perkins Company

NEWARK - - NEW YORK

J. & P. Preferred Stock.

J. & P. Preferred Stock.

Heikes—Huntsville—Trees



Established 1872

1500 Acres

**FRUIT TREES
ROSES and other
ORNAMENTALS**

For the wholesale trade.
All of our own growing.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

L. R. TAYLOR & SON

Topeka, - Kansas

FOR FALL 1917

A Fine Lot of

Apple Seedlings

JAPAN PEAR SEEDLINGS

Forest Tree Seedlings

-ALSO-

Apple Trees

Peach Trees

Pear Trees

Cherry Trees

Forest Trees

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of
Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX
and
HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY
GENEVA, N. Y.

70 Years

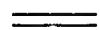
1000 Acres



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE



THE

North-Eastern Forestry Co.

CESHIRE

...Connecticut...



Where we grow "The Stock Too Good for Department Stores."

A block of young Conifers and Shrubs adjoining our new office building, with Ford Container in the rear.

Acreage planted now is 175 acres in stock; good blocks to dig this fall; sidetrack laid and storage-cellar and packing-house building.

Particular buyers who want something better than ordinary quality are invited to visit us and see our stock. Price and size do not determine quality.

PRINCETON NURSERIES

Wholesale Only

(But not to Department Stores)

Princeton,

New Jersey

J. H. Skinner & Co.

Topeka, - Kansas



Apple Seedlings

Japan and French

Pear Seedlings

Forest Tree Seedlings

FRUITS TREES

SMALL FRUITS

Rhubarb, Myatt's Linnaeus, divided roots, pure stock; Shade Trees, including a fine lot of Soft Maple and White Elm.

CATALPA BUNGEI

6½ foot stems, straight and smotoh

Bechtel's Double Flowering Crab

Ornamental Shrubs

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

**Rawhide Brand of Shipping
Tags and Tree Labels**

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

ORNAMENTAL

TREES, SHRUBS, VINES, EVERGREENS
HARDY HERBACEOUS PLANTS

225 Acres

Entirely devoted to the growing of the
best quality of ornamental nursery stock.

WHOLESALE ONLY

We also grow the "unusual" things, you
cannot find elsewhere.

Small Trees and Shrubs for
Planting in Nursery Rows.

We shall have our usual supply for Spring
delivery. Catalogue ready January first.

RAFFIA HEADQUARTERS

Supply of our usual brands on hand at
all times.

Thomas B. Meehan Co.,
WHOLESALE NURSEYMEN

Dresher, - Penna.

French Seedlings

If yours arrived complete—in good condition—well-graded and properly packed—promptly handled and at minimum importing expense,—stick to your present source of supply. We can't offer more. But—if you didn't get all this, our customers did and if you are interested, we will refer you to some of them in your own state and you can ask them about DELAUNAY'S grading and packing and the service and expense. The proof of the pudding is the pudding, you know.

War conditions in France—labor shortage, use of land for food crops, etc.,—make seedlings scarce this year. We can take care of our regular customers and some others. Complete 1917-1918 list is ready. Ask for it. Ask Delaunay Customers anywhere what they think about his stocks and our service.

John Watson & Company

NEWARK - NEW YORK

Agents for
F. DELAUNAY, Angers, France.

For Fall of 1917

*WE will have our usual line
of Ornamentals, Shade
Trees, Perennials, Apple,
Plum, Cherry, Peach, etc.*

C. M. Hobbs & Sons

Marion County

Bridgeport, - - Indiana

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa.

STARK BRO'S

Extra Heavy 2-Year Grape

Leading varieties, especially Concord. Strong tops and big roots, greatly preferred by the Retail Trade. Our heavy Extra No. 1 2-year grades will please your customers and cost no more than the ordinary No. 1 grade usually offered.

The vines we grow in Erie Co., Pa., in the fine grape soil along the South shore of Lake Erie, are unsurpassed.

In addition to Concords, we will have Moore Early, Niagara, Worden, and other standard varieties on which we will be pleased to quote.

Special prices for early buyers—send us your want lists.

Stark Bro's Nurseries LOUISIANA, MO.

Grape Nurseries in Erie Co., Pa. Best Grape Soil in America

The Best In Nursery Products

We carry a full line of fruit and ornamental trees, evergreens, shrubs, etc. Send us a list of your wants.

A FEW SPECIALS

Oriental Planes from 1¼ to 3 inch caliper. A large stock of Sugar Maples, American Elms, Carolina Poplars, Lombardy Poplars, Beech grafted River's, and Fern-Leaved, Double Flowering Japan Cherries, Prunus Pissardi, Flowering Apples, Flowering Peaches, Magnolia Tripetala, Japan and American Judas, Japan Walnuts, American Arbor Vitae, Hemlock and Norway Spruce, Altheas, Forsythias, Philadelphus, Viburnum Plicatum, Weigela, Eva Rathke, etc.

10,000 Downing Gooseberries, 2 years No. 1.

HOOPES BRO. & THOMAS COMPANY

THE WEST CHESTER NURSERIES

Established 1853 West Chester, Pa. Incorporated 1907



BERRY'S Wholesale Nursery

Small fruit plants in variety; rhubarb; horseradish; California Privet; Barberry Thunbergii; Hydrangea P. G.; Spiraea Van Houghti; Peonies, etc.

See list before placing your order.

P. D. BERRY,

Dayton

Ohio

We Are Prepared To Supply The Trade

ROSES, Field-grown, own roots and budded.
ABELIA GRANDIFLORA. Transplanted, field-grown.
BERBERIS JAPONICA.
AZALEA INDICA (Home-grown)
GARDENIAS.
ENGLISH LAUREL.
MAGNOLIA GRANDIFLORA.
MAGNOLIA FUSCATA.
OLEA FRAGRANS.
CAMPHOR (pot-grown.)
LIGUSTRUM JAPONICUM, LUCIDUM, NEPALENSE,
and other good varieties, fine bushy plants.
SATSUMA ORANGE. Field-grown, budded on Citrus
Trifoliata.
BIOTA AUREA NANA (Berckmans' Golden Arbor-
vitae)
BIOTA AUREA CONSPICUA.
RETINISPORA. In variety.
JUNIPERUS. In variety.
WISTARIAS. Grafted, best sorts.
APPLES.
JAPANESE PERSIMMONS.
ENGLISH WALNUTS.
MULBERRIES.
SPIRAEA THUNBERGII. A beautiful lot of stocky
plants.

A fine stock of Hackberries, Koelreuteria, Tulip Poplar, Magnolia Purpurea, Texas Umbrella, Sycamore and Elms.

Send us a list of your wants and let us give you quotations.

P. J. BERCKMANS CO., Incorporated
Fruitland Nurseries, Augusta, Georgia

ENGLISH NURSERY STOCK

GROWN IN LARGE QUANTITIES

RHODODENDRONS, a splendid lot this season, fine bushy plants. Plenty of the hardy Catawbiense named varieties suitable for the American climate including the newer and superior kinds, and well budded plants for forcing.

AZALEAS, ANDROMEDA, KALMIA and other American plants in great variety.

CONIFERS a large stock, of all hardy kinds.

HARDY ORNAMENTAL, EVERGREEN and DECIDUOUS TREES. These at right prices.

ROSES. Dwarfs and Standards, all leading kinds in quantity.

CLEMATIS AND CLIMBING PLANTS.

FRUIT TREES Espalier trained pyramids and bush fruits in quantity.

FRUIT TREE STOCKS, APPLE, PEAR, PLUMS, etc.

A general assortment of hardy outdoor stock. Glad to answer inquiries.

No Agents. Write direct for wholesale catalogue to

WALTER CHARLES SLOCOCK, Goldsworth Nurseries, Woking Surrey, England

Half an hours rail from London & S. W. Ry., Main Southampton Line.

Over thirty years successful trading in the states.

Cable Slocock Woking A B C Code 5th edition used.

For FALL 1917 -- SPRING 1918

5,500 CATALPA BUNGEII, 1 yr. heads:
3-4 ft., 4-6 ft., and 6 ft. up.

20,000 CAROLINA POPLAR, 6-8 ft., 8-10 ft. and 10-12 ft.

120,000 BARBERRY: Thunbergii, Purple-leaf and Vulgaris, 2 and 3 yr. transplanted; 12-18 in., 18-24 in., 2-3 ft.

170,000 PRIVET: California, Ibota, and Amoor River, 2 yr., 12-18 in., 18-24 in., 2-3 ft.

Also a large and complete line of high quality Nursery stock for the Wholesale trade. Send for trade list.

T. W. RICE, GENEVA, N. Y.

BUNTINGS' NURSERIES

G. E. Bunting & Sons, Props.

SELBYVILLE, DELAWARE.

Offer for fall 1917 Spring 1918

Good stock of

APPLE TREES

STRAWBERRY PLANTS 60 VARIETIES

ASPARAGUS ROOTS 1 and 2 yr.

CALIFORNIA PRIVET 1 yr.

BARBERRY THUNBERGII 1 yr. and 2 yr.

SPIREA VAN HOUTTE 2 yr. and 3 yr.

DOROTHY PERKINS ROSES 1 and 2 yr.

Before placing your order write us for trade list.

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Fall 1917

GRAPE VINES—One and two years old. Varieties largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas. Free from weed seeds, all recleaned and guaranteed first class.

Correspondence solicited. Price list upon request.

CHAS. M. PETERS

P. O. Address, Salisbury, Wicomico County, Md., R. F. D. 3

Long Distance Phone and Telegraph, Salisbury, Md.

The Framingham Nurseries

200 Acres

High Grade

Trees, Shrubs,

Evergreens,

Vines, Roses,

Etc.



Fine Stock

of

Rhododendrons

Kalmias

and

Andromedas

Send for Price List

W. B. WHITTIER & CO.

FRAMINGHAM, MASS.

We have a splendid stock of

Grape Vines

and other small fruit plants for the Nursery trade, graded up to the highest standard and sure to please you.

Give us a trial order, send in your list now for quotations

A. R. WHELOCK

SUCCESSORS TO
WHELOCK & CONGDON

North Collins,

N. Y.

P. OUWERKERK,

No. 216 Jane St., Weehawken Heights, Hoboken, N. J.

Rhododendrons, Clematis, H. P. Roses, Hardy Azaleas, Paeonies, Magnolias, Box Trees, Fancy Conifers, Hydrangeas and Shrubs, our specialties at our HOLLAND NURSERIES. Some of the goods on hand here during the packing season.

Watch the Advertisements in
THE NATIONAL NURSERYMAN

They Bring the Answer

Address HATBORO Office for Rates

REMEMBER!

If its a hardy perennial or so called old fashion flower worth growing, we have it in one shape and another the year round. We have the largest stock in this country, all Made in America, and our prices—

Why say more here. Send for our Wholesale price list of varieties and benefit from the opportunities this affords you.

Our motto: "Maximum Quality, Minimum Cost."

Address, R. W. Clucas, Mgr.
Palisades Nurseries, Inc. Sparkill, N. Y.

You can save Time and Money

If you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

Sarachan & Rosenthal

64-66 Hanover Street

Rochester, - - New York

Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

Prepare for Fall by securing the best Cherry to be found. Our blocks of Cherry are the largest in the U. S. and quality the best. While the U Boats have been sending Mahalebs to the bottom the past two years, we have been fortunate in securing our usual supply and will have a splendid lot of trees to offer in the following:

CHERRY TWO YEAR general list of varieties

CHERRY ONE YEAR 11-16 up Sweets and Sours

PEACH ONE YEAR leading varieties

PLUM Japans, European and Hansen Hybrids

COMPASS Cherry and Apricots

APPLE leading varieties in connection with other stock only

Grafted English Walnuts and Northern Pecans

Special prices to car lot buyers on large orders

WE OFFER

Grape Vines, Currants and Gooseberries
in all varieties and grades

—also—

Grape and Currant Cuttings and Light
Grade of Vines for Lining Out
in Nursery Rows

WRITE FOR PRICES

F. E. SCHIFFERLI, Fredonia, N. Y.

We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER - - MARYLAND

We offer for Fall 1917

250,000 PEACH, 40 Varieties, 1 year buds

CALIFORNIA PRIVET, 1 year and 2 year

ASPARAGUS, 1 and 2 year

DOWNING GOOSEBERRY PLANTS, 2 year

BARBERRY THUNBERGI, 2 and 3 year transplanted

Can supply the above stock in car load lots or less, also, have a large stock of Rhubarb, Cumberland Raspberry Plants, Spireas, Deutzia Assorted, nice specimen plants. Evergreens, Horse Chestnut, N. Maple, Lombardy Poplar and Planes, etc.

We will make attractive low prices for early orders
Send List of Wants

For FUMIGATION With
HYDROCYANIC ACID GAS

"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.
100 WILLIAM ST. - NEW YORK, N. Y.

WOOD LABELS

For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

Dayton Fruit Tree Label Co.

South Canal St., Dayton, Ohio

Hill's Evergreens

You can work up a good profitable trade in Evergreens if you have the right kind of stock. Our main specialty for over half a century has been the propagation of young Evergreen stock for the wholesale trade in immense quantities at low prices.

We have all the leading varieties in small sizes, for all purposes, suitable for lining out to grow on for your trade.

Nurserymen who have heretofore depended on Europe for their young Evergreen plants can now be assured of a good reliable source of supply right here in America, and we solicit the opportunity of quoting on your requirements.

"Made in U. S. A." and "American Stock for American Planters" should, from now on, more than ever, be the slogan of American Nurserymen for it means "money saved in the long run" to start with nice, strong, sturdy, vigorous American-grown stock which has been produced right here in America.

YOU want to keep posted on Evergreens;

WE want to become better acquainted with you;

Let's get together.



The D. HILL Nursery Co., Inc.

Evergreen Specialists

LARGEST GROWERS IN AMERICA

Box 401

-

Dundee, Ill.

Native Trees, Shrubs and Vines

At Special Prices
WHOLESALE ONLY

Sweet Hollow Nurseries

WEST HILLS, HUNTINGTON

Long Island,

-

New York

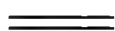
C. Van Kleef & Company

Nurserymen

BOSKOOP,

-

HOLLAND



Specialties: Kalmias, Andromedas, Ilex opaca, crenata, glabra, Azalea viscosa, nudiflora, calendulacea and arborescens, Cornus florida rubra, Vaccinium corymbosum and macrocarpa, etc., etc.

Representatives:—

John Van Kleef and John A. Driesprong

From 1 February until 1 June

Care Maltus & Ware,

14 STONE STREET

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NEW YORK

WE are wholesale growers of Apple stocks and Japan Pear stocks.

We can furnish any grade. Get our prices. We pack securely so we can guarantee safe arrival anywhere in the United States.

F. W. WATSON & Co.

Topeka,

-

Kansas

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXV.

HATBORO, PENNA., OCTOBER 1917

No. 10

Deciduous Hedges

Besides the trimly clipped hedges referred to in our previous issue there is a type of hedge not so commonly seen, yet when we do come across a good one the memory of it lingers.

These are the ones formed of slower growing plants, such as Beech, Hornbeam, or any twiggy long-lived plant that adapts itself to the purpose. The above mentioned

freedom in the early stages.

It is better to knife prune rather than clip them until the hedge is well formed, after that they may be clipped to a very uniform face.

When planting a Beech or Hornbeam hedge it is better to start with plants two or three feet high, set two feet apart, than to attempt to form a hedge with plants



A well grown Hornbeam Hedge, Carpinus Betulus.

plants are perhaps the best, although Honey Locust, Cockspur Thorn, *Euonymus alatus* are all good and when well grown are extremely ornamental. The essential requirements for a really good hedge are time and an even lot of young transplanted plants to start with. It is not wise to set the plants too close as they naturally attain large proportions and must be allowed a fair amount of room for each individual plant to develop and grow with

already grown, say five feet or more. There is always a danger of the larger plants, even if the transplanting is successful, losing their lower branches and it is very difficult to make a hedge fill out at the base.

With the younger and smaller plants a thick base is assured and by the time the plants grow together the branches are well interlaced insuring a compact uniform hedge.

Three Wars and Their Sequel

Read by H. L. Hillenmeyer, Lexington, Ky., before the Meeting of the Southern Nurserymen's Association, Atlanta, Georgia, August 29th and 30th, 1917.

IT is the tendency and province of the old to live in the past, that of the young in the present and future. The experience of the past is the lamp that lights the future to the one. To the other the hope and purpose of today is guided only by the dim lode star, darkly seen through the gloom of that future.

In the beginning, may this bit of personal history be interjected that you may know why I have been assigned the subject "Three Wars and Their Sequel."

One hundred and fifty years ago, save one, in that matchless valley between the Alps and Vosges, watered by the Rhine, was established a modest nursery. It prospered and expanded, as all effort directed by ambition, knowledge and honest zeal will prosper, and in time came to be the largest in eastern France.

Later came the French Revolution and its saturnalia of horror. It was the pent but maddening plea of the masses that man be freed. But the early ambition of that young Corsican, that guided its purpose, was debauched to his own aggrandizement. Nations are ever hero worshippers. His followed him with the same blind fatuity that today is laying waste, with wanton destruction, under the direction of another mind, those same fair fields.

When the hope of that unhallowed ambition forever went down in the defeat at Waterloo, the wreck of that nursery, wrought by the passing of contending armies was as the devastation of this fair section of the Southland, in that later devastating march to the sea.

When the dove of peace again brooded over that land, and this, their sons, poor in material wealth, but rich in the priceless heritage of undaunted manhood, either rebuilt their fortunes above their smoking ruins, or concealed their poverty among strangers, rather than remain among those who had known them in their prosperity.

It was for this reason that after the first great conflict on that side, every quarter of the globe was enriched by the exodus of the impoverished but imperishable flower of its young manhood.

After the second, all this fair Southland sent from its rent bosom so many unconquered sons, later to do it honor in every part of the union or where their fortunes were cast. In this connection, I shall not advert to the Franco-Prussian war of 1870, further than to say that the fate that has now befallen Belgium, was then mitigated in Alsace-Lorraine only in degree, and as effecting its fruit and nursery interests, yet here again, was a glorious resurrection.

And now the third, and let us hope last, Armageddon broods over the face of earth and sea, continued and sustained by the hallowed purpose, that all men be free in the enjoyment of that liberty, without fear, that is the divine inherency of weak and strong alike. These are the facts of history, and passing from the analogies of

two wars, we may with safety forecast the sequence of the third. Their followings affected every industrial and productive purpose, but its influence on our particular art is the theme of present consideration.

War is ever immediately destructive, but always remotely constructive, through the stress of those necessities that follow in its wake. The wars that embroiled continental and insular Europe in the first quarter of the last century, depleted her manhood, disrupted her industrial system, exhausted her concentrated food stuffs, enforced changed methods of human sustenance, and brought men more closely to dependence on the immediate givings of the earth.

While twice such besom of destruction had swept aside interests just such as ours now, phoenix like they arose from their ashes, greater in their wider field of opportunity, because of the changed conditions and needs of the people among whom they were located.

When nearly three score years ago a similar blight fell on Georgia's plains, and all the sunny Southland, your nursery and fruit interests were then negligible. You had been nurtured in the lap of luxury and abundance. Your soil was so teeming in its possibilities, so rich in its money yielding harvests, and your opportunities of obtaining elsewhere, all that you coveted, so ample, that your capacity of self sustenance in other ways was entirely overlooked.

With your labor system shattered, your immediate resources dissipated, your imports cut off, your currency debased, and gaunt want stalking a grim spector through your land, your immediate and only resource was to return to nature, and seek from her bountiful bosom the only relief possible for the time being. It was through the stress of scarcity and high prices that then prevailed that your agriculture received an immediate and continued impulse that has added inestimably to your civic wealth.

You need not be reminded that your nursery interests, of which you are now the proud representative, more than any other form of soil culture was amazingly developed, greatly prospering not only those therein engaged but more especially those that availed themselves of your offerings.

The development of the nursery and fruit industry of both south and north, received a greater impetus in one generation after the Civil War than in all time before it. Memory reaches clearly to conditions before that war. There were no commercial plantings. We lived happily in a land of plenty, where every land owner had a vine and peach tree, but the city dweller enjoyed only the east-a-way from the bounty of Dives, because his needs were hardly in the purview of either nurseryman or fruit-grower, and both were there few.

The sorer want that then pinched the southern states laid likewise its grip upon their borders. There was not

then so much said about "food conservation" as now, but it was the banner day of fruit drying in the sun. That war gave birth to that huge industry that today preserves all fruit and vegetables in a fresh state with neither sugar, salt or any preservative. While the day of sun drying is past, the present war is stimulating in an unusual way and field the areator, dessicator and dehydrater that all the fragments of the summer abundance be saved. If our first great war worked to our good, why not this?

Again, reiterating the opening aphorism that old men look into the future through the past, may I assume the role of "class prophet" and foretell through mystic vision what the present war has in store for us, as nurserymen, and our prime ally, the fruit grower. We will not now know the devastation of invading hostile armies, but we will keenly feel the grip of taxation, to feed more abundantly, to equip more thoroughly, and compensate more munificently, the armies that will uphold the honor, dignity and safety of this country, than any the world has ever known.

To do this implies the sacrifice, by all the people, to live simply and to economize as they have heretofore, under the same circumstances, whether here or elsewhere. This will enforce on us the truth that man lives not by bread alone, nor meat. It will greatly change our dietary as a nation, from concentrates to the more diversified diffusives, realizing the poet's dream that man shall be unfleshed through blood.

When I reflect that in my own hamlet town there are four thousand tyro gardeners, that heretofore have never committed to earth a seed or any living thing, or known the joy of creating through the medium of the earth a fruit or flower and that in the broad expanse of this country, there are countless millions of such, scattered everywhere, the recognition unbidden comes that it is the renaissance of a nation, in bringing it nearer to dependence on itself and on the simple bounty of the earth.

When I reflect further than fruit, flower, shrub and tree are invariably associated with any home interested in and aspiring to soil culture, the conclusion is irresistible that with this added host of planters, the sequel of two wars will be verified in the third. The tradition of the one war that made me an American—and may I proudly add a near Georgian, for nearly four score years ago, Savannah by the sea, received kindly and prospered greatly a bankrupt young Hittite from the olden fold, is now a happy memory. When I clearly recall the immediate desolation that befell the nursery interests of my own state during the second, and their speedy and triumphant resurrection and expansion thereafter, through the adverse agencies adverted to may now be confirmed in your faith and hold fast with confidence. So long as the mouth of all humanity waters for the fruits of our art, shall we flourish, and when the bread, which is our daily prayer, is shortened, then, greater is our opportunity.

John Watson, under date of September 19th, writes he has just returned from several weeks trip in western New York and finds distinctly better feeling among nurserymen regarding the coming season than was in evidence in June.

ROLL OF HONOR

It is the purpose of the National Nurseryman to publish a roll of honor consisting of the names of those nurserymen serving in the United States army in the present war. We shall appreciate it if our readers will send us their names and photographs if possible.

Lloyd C. Stark, Major of the Field Artillery, U. S. Officers' Reserve Corps.

Vice-President and a Director of Stark Bros. Nurseries and Orchards Co., Louisiana, Mo.

President of the National Association of Nurseries, Meredith P. Reed, Captain, Sixth Company Section U. S. Officers' Reserve Corps.

Vincennes Nurseries, Vincennes, Indiana.

George C. Taylor, Battery F, Second Pennsylvania Artillery. Thomas Meehan & Sons, Germantown, Phila.

Wade Muldoon, Headquarters Train and Military Police, Mt. Gretna, Penna. Thomas Meehan & Sons, Germantown, Philadelphia.

William Flemer, Jr., F. & F. Nurseries, Springfield, N. J. Private U. S. Expeditionary Force, Ambulance Corps, Battalion No. 23, Section No. 23, France.

Clay M. Stark, Stark Bros. Nurseries & Orchards Co., Louisiana, Missouri. American Field Service. Now in France.

F. Burnette Kelley, of Newark, N. Y., has joined the staff of the new Princeton Nurseries, Princeton, New Jersey. Mr. Kelley is well known to the trade; he is a graduate of Cornell University where he specialized in the lines bearing particularly on the nursery business;



F. Burnette Kelley, Newark, N. Y.

and his practical experience in the wholesale nursery business covers a ten year period at Newark, N. Y. The organization being gotten together in the Princeton Nurseries would seem to indicate that they have confidence in the future of the nursery business.

Standardizing Retail Prices

Read by Mark Lanier, Lockhart, Ala., before the meeting of the Southern Nurserymen's Association at Atlanta, Ga., August 30, 1917.

IN touching on this question I realize that it is one with many prickly points, and one that concerns almost every company represented in the association membership. I bring to you, gentlemen, no formula for immediate relief. I believe that it is a question that must necessarily be worked by degrees and by education. Great movements requiring the thorough drilling of the school of experience are not accomplished overnight. I merely hope to bring the subject up at this time for further emphasis. This subject has already received many years of consideration and debate; it is a subject

Crops generally are excellent and prices of farm products are high. Inasmuch as the nursery business is only one branch of agriculture, and the bulk of our business is done with people of or on the farm, the result is apparent. I believe the time is ripe for the adoption of a much needed stiffening along this line.

I am not likely to cause the least surprise when I state that there is a disconcerting lack of uniformity in retail prices. I venture to say that there is a variation of 500% in the quoted retail prices of certain standard trees in our territory today. This does not mean that



*Strawberries growing in new ground. They are Big Joe and Chesapeake, two of the best.
W. F. Allen Co., Salisbury, Md.*

that has from time to time been resurrected at associational meetings and argued over from all sides. Yet it is one that can not be safely dropped, and one that should receive our individual and collective efforts toward solving; in fact, if we would command the high eminence that our line of business deserves, its solution is imperative.

I believe that the time is here when a plan of standardization of retail prices can be put in with the minimum of confusion. We are entering a period of what promises to be real prosperity for the nursery business.

the seller obtaining the highest price makes a profit of 500% or anything like it. It means that the seller at the low price, if he be a retailer, is attempting the financial suicide of unloading a surplus on a wholesale basis when he is staggering under a retail cost system; or if he be a wholesaler, is knifing the entire business structure by unloading stock in a field, the absorptive capacity of which is extremely limited except at a cost in sales promotion that the wholesaler does not even begin to assume.

The weak joint in our armor is that we fail to take the

proper perspective of the cost of the delivered tree in its relation to volume. In other words, if the retail purchaser would come to our nurseries and buy all the trees we could grow without any sales effort on our part, we could afford to sell at a very much lower price than we do, but retail purchasers are not built that way. We have got to drum, fight, plead, drive, exhaust printers' ink and consume appalling quantities of postage in order to convince the consumer that he needs our product in volume. Now, mind that word volume—underscore it, because we must have volume of sales if we exist. Right there is where we lose our vision, in the relation of prices to volume. The majority of our retail sales are small—orders averaging only a few dollars, and to get the necessary volume for our business it is absolutely necessary that we shoulder an expense department that amounts to more than the cost of growing and packing. Whether we employ salesmen or catalogs, or both, the expense is unavoidable. In the case of a salesman, if he is any good, he commands a handsome salary or profit-sharing arrangement; he has to have a car which uses gasoline, pay other heavy expenses and make two trips, once to sell and once to deliver; in fact, sometimes he goes more than once to sell. There is an overhead expense, salesmanager, office and general expenses; the expenses have to be averaged over good years and bad; years when there are wholesale cancellations, and all kinds of complaints and risks that arise in a business of this kind. These expenses, I say, are all absolutely necessary to volume, and the legitimate retail prices must be based on the same, whether we sell one tree or 1,000; whether we have a surplus left at the end of the season or not, the per-tree cost is there.

In that case, the man, who, having a surplus that he wants to unload, or the man who for lack of sales organization (and this is far too often the case) decides to make a bid on cheap prices, so-called "wholesale" prices; or the man who attempts to do a wholesale business with retail buyers; either can create a disturbance with a very small stock in the normal flow of business that gives the whole industry a not very pleasing appearance. In the long run the consumer does not benefit, because if every tree that is to be moved the coming fall were sold on that basis, most of the retailers would be bankrupt by next spring and the wholesalers would soon follow. The essential machinery of distribution would break down, and the fruit and nut-growing industry would soon have to propagate their own stuff or go without. It is the few instances of this kind of practice, having an influence altogether beyond their actual extent, that keeps the trade irritated without promising any solid relief for the ultimate consumer.

I would not attempt to say at just what level prices should hold. There are instances where higher prices are asked and obtained than are justified. I do not uphold the quoting of unreasonable prices, or of maintaining an elaborate sales system carried on for the purpose of splitting profits too many ways. Neither do I agree with the plans in some quarters of exploiting new plants of limited supply and doubtful, or at least, untested,

merits. However, legitimate competition, the invariable law of supply and demand, will in the final analysis control.

But I say that if we succeed in the retail tree business, we must maintain a price level somewhere between the actual cost of growing, packing and distributing, and that which constitutes profit. The minute we look at a small surplus that may be disposed of at a price based on expediency rather than cost; that is, using wholesale methods under retail conditions, we have lost the proper perspective.

We must get it clear in our individual minds that the wholesale and the retail fields are entirely separate and distinct. If we would engage in both lines, we must base our prices on the proper respective cost levels—keep the two lines entirely apart, and above all things, sell only to the trade at wholesale prices. Selling to the trade is largely reciprocal, as we all have to do more or less trading among ourselves.

I only state the obvious, gentlemen, when I say that the retailer is the main factor in making volume of trade possible. He is creative. His salesmen or his catalog, or both, are largely responsible for originating the desire on the part of the public for our product, and he is chiefly the means of the necessary expansion that the industry enjoys. Therefore, it is to the vital interest of every grower or handler of nursery stock that the retail end of the business have all possible co-operation in determining the correct price at which his goods may be sold in a field filled with competition from his own fraternity.

Announcement is made that the Fraser Nursery Company of Huntsville, Alabama, has purchased the nursery and greenhouse stock, together with all equipment and the good will of the Elmwood Floral and Nursery Company of Birmingham, Alabama, leasing the real estate of that firm for a number of years. The change took place on September 1st. Nurserymen and florists should correct their mailing lists, cancelling Elmwood Floral & Nursery Co. and adding Fraser Nursery Company, Box 217, Birmingham, Alabama.

Oliver W. Fraser, Vice President of the Fraser Company, will have active charge of the Birmingham plant with J. P. Foster who has been field foreman of the Huntsville nursery as his assistant. Both parties will move their families to Birmingham at once.

The Elmwood Nurseries have enjoyed a large business in the past and their line of ornamental plants is conceded to be one of the largest and best in the South, the stock of broad leaved and coniferous evergreens being exceptionally fine. Messrs. Fraser will continue to operate the retail flower store in the Tutwiler Hotel.

In the Commerce Reports of September 6th, a cablegram from the American Legation, The Hague, says:—

Algemeen, Handelsblad reports that the export of bulbs is prohibited.

We have also very good reason to believe that large consignments have already left Holland and are now on their way to the United States.

PRESIDENT'S ADDRESS

*By Harry Nicholson, at the Meeting of the Southern Nurserymen's Association,
Atlanta, Georgia, August 29th and 30th, 1917.*

I AM very thankful this morning to be able to be here, and have the pleasure of meeting you all again. This has been a very anxious year for us all, I know it has been for me, full of uneasiness and some dread as to what might happen, it has been a year the like of which this association has never seen before, not only in the condition of the world, but in weather conditions, in our planting season, and I doubt not that all of us have been losers more or less.

At the first of the season we hardly knew what we would do, the country being in such an unsettled condition, but as time passed we all decided to do the best we could to push forward, do our full duty as we saw it, and trust the rest to the Lord.

In spite of all, many of us have been surprised at the sales this year; the people are not forgetting that fruit is a very essential part of the food problem, and this has stimulated the sale of trees. The demand for peach trees is greater than the supply. Then too in many parts of the country, the crop of peaches and especially in this favored section of the great state of Georgia, has sold well, and made money for those that have handled it right, this has made a great demand for peach trees, especially the June buds. For many years there has not been such a demand, and right here I want to say to my brethren be careful, don't plunge and plant three times as many seed as usual, don't let us forget the years that have gone and the brush piles.

I believe it will be better for us all, if we will plant about as usual, or perhaps a few more, sell what we grow, hold up prices and make something out of what we do sell, I would rather buy a few trees each year to fill out what we may need than to have a lot to burn.

In the beginning of this year I could not help feeling unsettled and luke warm about going forward with our business, but as time passed and our President called on the country for its people to stand by him and try to grow the biggest crop they could, I pulled myself together and have been trying to do what little I could. My enthusiasm has grown as the time passed. I hope that each member of this association will try to make the coming year one of the very best in our business experience, by using every effort to grow the best trees possible in order that we may put in the hands of the farmer and planter the best trees that can be grown.

I want to say a few words about prices and this subject I suppose has troubled us all more or less, nearly all the necessary things have gone soaring sky high in price. Corn is two dollars per bushel and hogs 15 to 19 cents per pound, and everything else in proportion. I doubt if any of us ever remembers hearing of such prices before in the South. Our trees, with few exceptions, are the same old price, and it seems hard to get the prices up, our dealers grumbled very much when we asked one

cent more, but we are hoping that something can be done by this association from year to year to improve matters. There is only one way to do it i. e. co-operation, put our heads together, make out a schedule of what we think we can afford to sell at, and then stick to it. We are meeting here together from year to year, if I understand the object of these meetings, to try and build up our profession and business into a higher and a better thing, and the only way I see to do this is to help each other. If any of us know better methods and learn something helpful, tell the other fellow. I have been a member of the American Association for years and have watched it grow and step by step climb the ladder to usefulness and things worth while. In the last few years much has been done to uplift and better the profession and I want to urge each member of this association to join the American Association and show our appreciation of what they have done.

I hope while we are here that some one will urge that something be done to help to get more uniform state inspection laws, I want to call your attention, especially, to the laws that Florida and Louisiana, and now this year South Carolina, has, that at the end of each tiresome day, they require us to send copy of each and every invoice of all shipments. This makes nurserymen lots of trouble and expense. When the time comes, in the fall, to begin getting ready to ship we hardly know how to meet the requirements, if each state could have the same requirements much of the trouble would be saved.

Now I think I have talked about long enough, but before I stop, I want to say this to you. I hope we have all come here chuck full of the desire to learn something and to impart some good thing to this association, so that when we leave for our homes we may go away feeling that it has been good for us to have been here. I for one always go away with a closer brotherly feeling than when I came. We have this year the brightest prospects for the biggest crop we have ever made, this should help us all this fall and we hope to make good deliveries and be happy, but in our prosperity and happiness let us not forget the suffering and need across the sea. Let us remember that the nurserymen of this country stand for its best citizenship and let us not forget that our country needs the help of each one, may we ever be ready to respond to each call that may come to us.

September 8, 1917.

Gentlemen:—

We will be very glad to have you continue sending us the National Nurseryman, and are inclosing check herewith, covering the ensuing year.

We would be lost without it.

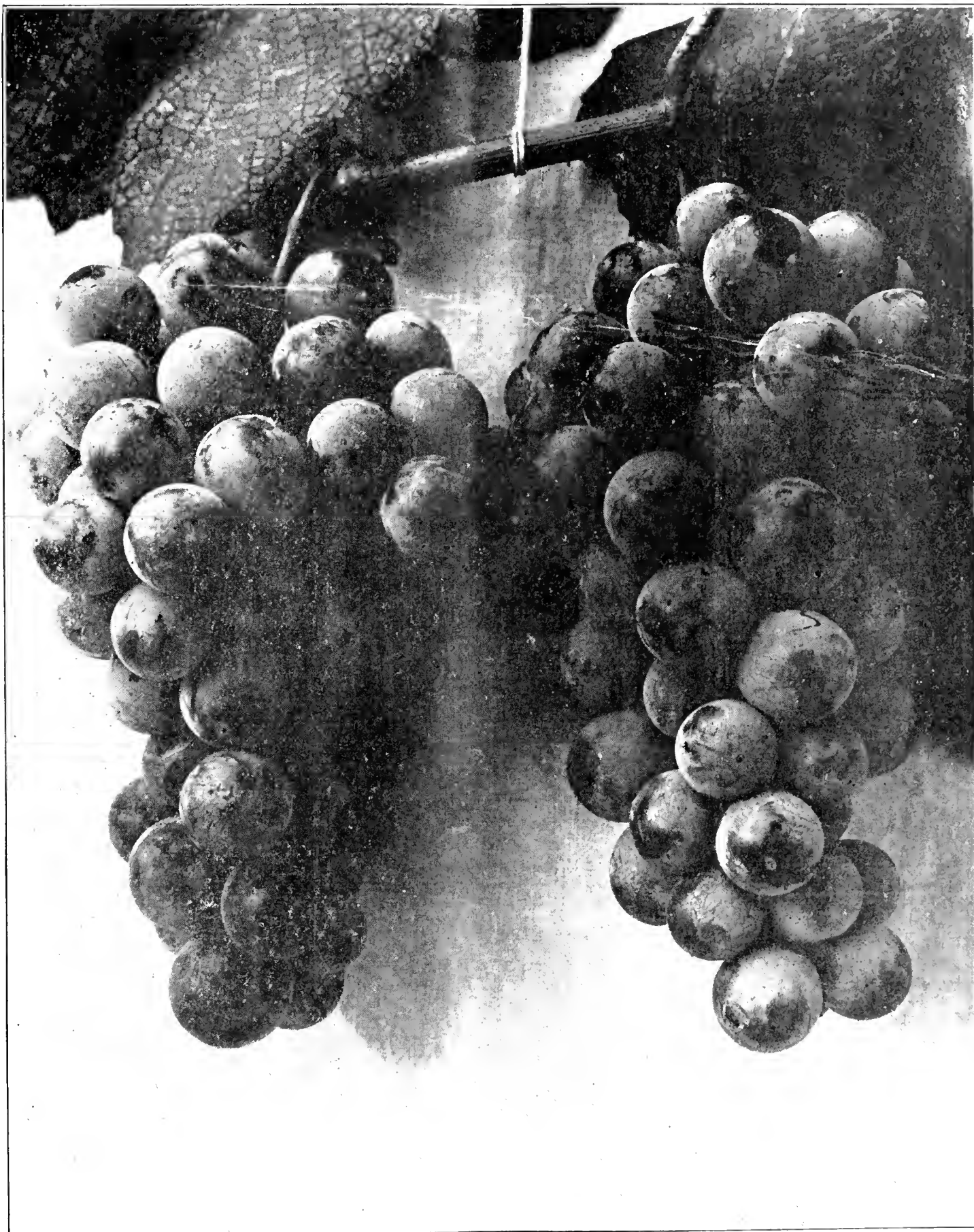
Very truly yours,

MALONEY BROS. & WELLS CO.

A NEW GRAPE

The illustration will give a fair idea of the new grape originated by T. S. Hubbard Company, Fredonia, N. Y., and named the Hubbard. It has been under observation since 1903 and since that time it has been compared

desirable grape to plant than either the Concord or the Niagara. Its color is black, the clusters are of good size and shape, the berries uniform, averaging with well-grown Concord. It adheres well to the stem, skin is



A new grape, "The Hubbard." Originated T. S. Hubbard Co., Fredonia, New York.

with many new varieties, but none have been found with so many excellent points. The Hubbard grape has proven itself of fine quality. It is a better shipper, more healthy foliage, and is a stronger grower than all it has been compared with. Its early ripening makes it a more

thin and tough, which makes it an excellent shipper. It does not crack very readily. The seeds are few and small and separate easily from the pulp. It is sweet and juicy, approaching the vinifera types. It ripens about ten days before the Concord.

An Attractive Nursery Office



Attractive Nursery Offices of the Elmhurst Landscape and Nursery Co., Argentine, Kansas.

An attractive nursery office and grounds is a valuable asset to a business that is often overlooked. Its advertising value can hardly be over-estimated if we judge it from the storekeeper's standpoint.

Immense rents are paid by storekeepers for stands on busy streets where they may display their goods to the passing public.

Since the advent of the automobile the prospective purchaser of the nurseryman's goods has been brought to his door and no opportunity should be missed to display his

goods in the most effective manner.

The illustration shows the offices of the Elmhurst Landscape and Nursery Co., Argentine, Kansas, and shows a very attractive office and grounds indicating an up-to-date business and that they are fully alive to the value of this form of advertising.

The old complaint that the nurseryman was at a disadvantage in displaying his wares before the public belongs to a past age. The automobile has made the highways the parade ground of the buyers of nursery stock.

VAN GELDEREN & CO.

New York, September 15th, 1917.

Mr. W. B. Van Eyk, member of the well known nursery firm of Van Gelderen & Co., at Boskoop, Holland, is one of the unfortunate Hollanders who are waiting in New York for a steamer to take them back home; Mr. Van Eyk arrived in this country on June 20th by S. S. Ryndam, and is all through with his work. Besides taking orders for next season and collecting bills, Mr. Van Eyk devoted quite a little time to straighten out the S. S. Nieuw-Amsterdam affair, the hoodoo steamer with more than 5000 cases of nursery stock on, which left Rotterdam for New York on the 31st of January and returned back in port of Rotterdam on the 3rd of February and had to be unloaded afterwards; but he is glad to state, that he thinks to have reached a very fair agreement with the nurserymen here who had goods on that steamer, a fifty-fifty deal on the proper loss is what Mr. Van Eyk is going to put up to the members of the Holland Nurserymen's Protective Association; Mr. Van Eyk says he found the nurserymen in this country very fair in the matter, and calls them a

fine lot of perfect gentlemen.

In regard to the shipping possibilities for next season, Mr. Van Eyk is not very optimistic about fall shipments, owing to the fact that there are very few available steamers on the other side now to carry the goods across; but he has good hopes for the spring shipments, because (according to newspaper reports) Holland will get their usual supply of food-stuff, etc., from this country again after December 1st, that will give the nurserymen steamers to carry goods here during the next spring.

In regard to conditions of the nurseries in Holland, it can be stated that one-third of the nurseries already are ruined by neglect of energy or capital or are just turned over into vegetable gardens, and if this war keeps up much longer, there will be very few nurserymen who can keep their business up as usual, in fact, the Holland nurserymen are up against it hard.

In regard to business over here, Mr. Van Eyk says, that he has never gone home yet with a better lot of orders than he has this time, and if only shipping will be possible, he hopes to make up quite a little on the tremendous loss they had last spring, owing to the impossibility then to ship goods at all.

W. F. Allen Company, Salisbury, Maryland



Crate of Strawberry Plants ready for shipment. Bunches on the top show how the plants are put up.

This Company was founded by W. F. Allen, thirty-two years ago. He and his three sons have been constantly associated with the business ever since. While they grow a general line of nursery stock, strawberries are their one big specialty. The nursery is located in the greatest strawberry section of the world, where the soil gives the best possible root system to the plants. The climatic conditions and the nature of the soil makes it possible to dig and ship plants throughout the winter and spring. They do both a wholesale and retail business, handling orders from twelve plants to over a half million. Their business last year amounted to over seven thousand different orders, and included a carload shipment of strawberry plants to one customer. The total output for the year was twelve million plants. These

were grown on a hundred and seventy-five acres. As will be seen by the photographs, it is customary to grow strawberries on new ground just after it has been cleared, before the tree stumps are taken out.

True to name, and skill in packing has been their aim in building their business. The results speak for themselves.

The accompanying half tone gives a good idea of their method of packing and insures plants reaching the customer in good condition.

The W. F. Allen Company is practically known all over the world, as they receive orders from far distant points, such as California, Bermuda, China, New Zealand, New Foundland and in fact everywhere where strawberries are grown.

September 18, 1917.

Gentlemen:—

I beg to advise you that as a result of the inquiries which I made in Washington concerning the alleged prohibition by the Holland Government of exports of bulbs to America from Holland, after due inquiry our Department of State has received from the American Legation at the Hague, under date of September 5th, the following report:

“Export of bulbs except under license prohibited.

Minister Agriculture announces export licenses will be granted to meet normal trade demands. Apparently no cause for American seed interests to be alarmed. Steamer Waldyk scheduled to sail this afternoon, she carries 26,000 cases bulbs and no other cargo.”

I trust that the above disposition of the matter satisfied your request for assistance in this matter.

Yours truly,

CURTIS NYE SMITH.

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EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in Nursery Stocks of all kinds. It circulates throughout the United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance	\$1.50
Foreign Subscriptions, in advance	\$2.00
Six Months	\$1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements. Drafts on New York or postal orders, instead of checks, are requested by the Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be addressed, Editor, Flourtown, Pa., and should be mailed to arrive not later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., October 1917

THE TIMES AND THE WAR. The war is beginning to make itself felt by every man, woman and child in the United States in one way or another. Every business is affected. Prices and values are away up in the air. Some items which in peace times had little value have now become scarce and expensive.

Labor especially is scarce and hard to get. Some of us perhaps are beginning to complain and fret because of the advance in prices and the scarcity of some items and are apt to put all the blame on mismanagement, poor laws, selfish monopoly or profiteering.

The truth is, when one stops to consider the gigantic change that is taking place, the pick of the manhood being taken out of the usual channels of production and the numerous resources being diverted from their accustomed channels to prosecute a world war, it is a wonder how it is being done so orderly, quietly and with so little interruption of the regular business of the country. It gives one a thrill to recognize such a vast democracy as the United States has but a single mind when right and wrong is being judged.

A recent trip through the middle west was an inspiration, and a final answer to those who feared that the selfishness of the individual would be fatal to our democracy in times of stress.

There seems to be no difference whether it be the young men who are answering the call of the country so willingly, the big business interests, the war gardens, food conservation or money, they are all being offered as a sacred duty to the country's need. Everything is being speeded up to meet the emergency. More is being done with less help. Businesses like individuals must keep themselves fit. Even though there be shortage of labor, a much higher cost of growing and doing business with a possible lessened demand.

It is up to the nurseryman to keep his stocks intact and

his equipment up to the mark to meet emergencies.

At first sight fruit and ornamental tree and plant growing is not a war measure yet it is really one of the most important. It is conservation in the best sense of the word and it is up to the nurseryman to work harder than ever to encourage people to plant.

William Flemer, Jr., joined the colors in June. Perhaps some of our readers will recall meeting him at the Philadelphia convention, as he was the only nurseryman in uniform attending. Mr. Flemer spent several months training at Allentown, Pa., and is now in France. The



Private William Flemer, Jr.

boys in the trenches will be glad to get letters from friends at home. His address is Private William Flemer, Jr., United States Expeditionary Force, Ambulance Corps, Battalion No. 23, Section No. 23, France.

PENNSYLVANIA INSPECTION LAW

The new State nursery inspection act for Pennsylvania is being put into operation by the Department of Agriculture in the Philadelphia district. There are 350 commercial nurseries in Pennsylvania and the Department plans to have three or four inspections each year of nursery grown stock, so that purchases made in this state can be guaranteed free from nursery pests or diseases.

By the terms of the act, the Secretary of Agriculture is given considerable additional powers to inspect and can also declare quarantine. Where a person wilfully allows infected trees to remain prosecution may be made.

Tree salesmen will be put under state control and will be licensed. The State Zoologist's Division, under Prof. Sanders, will have charge of the enforcement of the new law.

Standardization—Organization—Cooperation

(Continued from last month)

ORGANIZATION

I favor building the most thorough, the most perfect business organization possible, which, domiciled in some centrally located city of the country, under the management of a thoroughly capable man and corps of able workers, will do for this Association all that the management of a corporation does for its stock-holders. I will not attempt to define all the duties of such an organization. Suffice it to say that whatever is necessary for the promotion of the nursery interests, under the direction of

ing with the services he will render and the personal sacrifice he will make, for mistake it not that any man big enough to fill this place will have no trouble in taking care of himself within his own business and most certainly would accept the place only because of the service he could render his fellows.

Specifically, I want to mention a few of the things which this organization should do, and one of the first which occurs to me is the gathering of statistics. Statistics of every possible concern to the members of this Association should be available in the office of your gen-



187,000 Strawberry Plants in this load, all for one customer, W. F. Allen Co., Salisbury, Md.

your executive committee, this organization should do, and, in addition to the duties performed heretofore by your Secretary, the head of this organization would be business manager as well.

For executive, a man will be wanted, and in my opinion he should be one familiar with the problems of the members of this Association. He must, to be sure, be a man of vision, a man of strong executive ability, a man of unselfish life and purpose, desirous of rendering a great service; and if such a man can be found, and I doubt it not, and if I mistake not the results, he will lead us out of the wilderness of doubt and into the land of promise. Such a man should and will command a salary in keep-

eral manager. The average number of trees and plants used normally per season should be compiled and seasonable advice sent out to hedge against over-production in one line and under-production somewhere else. I believe that if we had these facts we would find practically the same amount of stock is used each season, and that our troubles come about largely because of lack of definite plans for co-operative distribution. At a given time, and as early in the year as is practicable, this organization should ascertain the number of marketable trees and plants in the hands of member growers, and each month thereafter all surplus in the hands of members should be compiled and distributed to the member-

ship of this Association upon their requisition. The aim in all this is to bring the buyer and the seller together upon a fair, equitable, and stable basis. I have often wondered if, after all, there is not enough good stock each year in the hands of the members of this Association to supply the needs of all, and if this is proven to be true, and our plan of distribution does not miscarry, would it not, to say the least of it, minimize the annual brush pile? What would be the worth in dollars and cents of the stock which each season finds its end in the annual bonfire? Someone has estimated this annual loss at \$1000.00 per member, mine has often been more, but if that be true and we were able to save any considerable part of this loss, would it not be worth striving for?

You are already declaring me Utopian, but before I have finished I may give you grounds to pronounce harsher judgment. So far I have not offered you anything but the most practical thought, have not hinted at a scheme which will not work to your mutual betterment, if you will work it. It all depends on your standing hitched, and if I can find a way I will do the hitching.

And again, I would make this organization purchasing agent for supplies if you please. Burlap, twines, box lumber, etc., etc., could most probably be purchased in quantity at considerable discounts, and routed properly could be handled car-load into certain districts at quite a saving to the buyer and without liability to the Association.

I would have this organization gather dependable information concerning propagation, cultivation, transportation, tariffs, etc. Just a word here in reference to transportation, because this is a problem which, like the poor, is always with us. A member of this organization should be a man versed in the affairs of transportation as applied strictly to the nursery business, one capable of auditing the freight and express bills of the members of this Association, and I doubt not there is a little fortune in good valid claims against the transportation companies in your old freight and express bills. Such a man could pay his salary and pick up for each of us a big salvage which, if I mistake not, would come in "mighty handy like." Such a transportation man would prove an exceedingly valuable asset, and the job is big enough to demand all of his time. It is absurd to think that affairs of such magnitude can longer be taken care of by a man who has other obligations and who, of necessity, makes sacrifices which he should not be called on to make.

I would have this organization gather all data possible in the matter of control and treatment of diseases and insect pests, and I want to say right here the nurserymen of this Association know more about diseases and methods of control than all the combined forces of the entomological associations. Who would question the ripe experience of these veterans who have, through practical study, laid up a valuable store of knowledge which you and I need and which they will be glad to give. This plan, carried to its consummation, will place in the hands of each the wisdom of all, making us co-workers together for the success of all. Utopia? There is no other road to success, individually, than along lines of co-operation. Man does not live to himself alone. Each one of us, for selfish reasons if for no other, is vitally interested in the success of every other one. An idealistic

dream? Without faith in a more perfect future, whether it concerns the conduct of a business, the affairs of a nation, or the final resting place of the soul, all progress ceases. I do not need to prove this statement.

CO-OPERATION

Now, friends, I have come to the last and final analysis of the cause. We may effect proper standards and apply such standards wherever needed, and we should. We may perfect the best business organization the world has ever seen or the mind of man conceived, and without the hearty, honest, and consistent co-operation of this body it will be time, energy, and money wasted, yes, worse than wasted. Co-operative dealing in the truest sense among the members of this Association will guarantee the success of this plan, and just as surely a lack of co-operation will mean failure. Having agreed that through a competent commission the nursery business in all its phases may be established, we must of necessity be governed by the report of this commission or its work is valueless. Your officers may, through the proposed manager's office, gather statistics answering every need which, if unused, will be as valueless as the stock you grow and fail to market. "Buy it from a member," should be the slogan of

STANDARDIZATION, ORGANIZATION, CO-OPERATION

this Association, and these words should be printed conspicuously upon our letter-heads and upon all our literature until burned upon our consciences. I do not want to be understood as favoring a boycott against a great number of worthy men who in a small way are conducting a worthy business and who have not yet found their way into our councils, but I am in favor of making this Association so serviceable that all such worthy ones will cry aloud for admittance. The success of an organization such as I am proposing suggests that each of us will, as far as at all practical; buy and sell to one another on a co-operative basis, standardized as far as it is possible to do so.

I have already stated that in any given season the probabilities are there is enough good stock in the hands of member growers to supply the needs of all, and if I am right, co-operative dealing, one with the other, would eliminate, or at least reduce, the annual brush pile. The members of this and auxiliary associations within the United States do practically the business of the country. Suppose we continue to buy trees and plants of these farmer growers only because we think it a pick-up. Are we, after all, greatly benefitted. I doubt not, if all the facts were known of misbranding, inferior grading, packing, etc., but that you pay more for your pick-ups than you do for stock purchased from a legitimate grower at advanced prices. Furthermore, who is the meanest, the "cussedest" competitor we have? Who is it that runs an ad in the classified columns of the farm journals during the planting season, "Strawberries \$1.00 per 1000. Black and dewberries \$3.00 per 1000. Fine plum, peach, apple trees at 2c each. Express prepaid." Ordinarily it is this same farmer grower. You bought the bulk of his stock at pick-up prices, but you left him enough to hammer you and other legitimate nurserymen to death. Some of us are critical everywhere else but here. We are as indifferent of whom we buy stock as was the old darky in my state who wanted to get married.

This old negro asked his master to buy him a license in a neighboring city. The master, being in haste, did not ask the name of the happy woman, but as he drove along he reflected on the many tender attentions that he had seen John lavish upon Malinda Wilson, the cook, and, concluding that there could be no mistake, had the license made out in her name. "There's your license to marry Malinda," he said to the old darky on his return, "you're as good as married already and you owe me only two dollars." The darky's face fell. "But Marse Tom, Malinda Wilson aint de lady Ise gwine ter marry. Dat wa'n't nothin' mo'n a little flirtation. Georgia Thompson, the laundress, is the one Ise gwine ter marry." "Oh, well, John," said the master, amused and somewhat irritated, "there's no harm done. I'll get you another license tomorrow, but it will cost you two dollars more." The next morning the old darky came out to the carriage as it was starting to town, and leaning confidentially over the wheel, said, "Marse Tom, you needn't git me no udder license, I'll use the one Ise got. Ise been thinkin' it over in the night, and to tell you de troof, Marse Tom, de conclusion ob my judgment is dat dar aint two dollars worth of difference between dem two ladies."

Yes, we are exceedingly critical in some of our dealings, but we care not a flip who grows the stock that goes into our orders. Leave his entire stock in the hands of the farmer grower for one season, withdraw your patronage from him, and he goes out of business. I want to say here that this renegade element, both growers and sellers, are kept in business by you men before me, and they will go back to growing corn and cotton when we quit buying their stock. Will we do it? It makes little difference, after all, whether the price is one thing or another, if this price is equitable and stable. It will be readily agreed that if each of us is able to sell his growing on a fair and reasonable basis, each year would be profitable where under the present chaotic conditions it is a gamble, pure and simple. More and more I am coming to believe that through close co-operative methods will we be able to place the nursery business on a paying basis and to relieve it of the many hazards which has been true of the past.

SOUTHERN NURSERYMEN'S ASSOCIATION

At the last meeting of the Southern Nurserymen's Association held at Atlanta, Georgia, August 29th and 30th a revised constitution was adopted including Article vii as follows:—

It shall be the duty of every member to report to the executive committee hereof, any character of dealings on the part of Association members not in accord with established business ethics. The Secretary shall once each year provide each member with blanks for ballot, upon which he shall make a report, and in case any member shall receive three or more adverse reports, the executive committee shall immediately make such investigation as will develop all the facts in the case, and bring their report before the next annual meeting of this Association. If, upon evidence deduced, it is proven that such members' dealings violate established ethical relations, he shall be expelled from this Association upon a majority vote of the members present at any annual

meeting, provided each member shall have the right to be heard in his own behalf before such action is taken.

The following resolution was also adopted:

That the Southern Nurserymen's Association in convention assembled August 29, 1917, at Atlanta, Ga., do hereby endorse the pending resolutions before the American Association of Nurserymen which provides for a business organization to direct the affairs of the Association, and urge the adoption thereof at the next annual meeting in Chicago; and that a copy of these resolutions be sent to the Secretary of the American Association of Nurserymen.

Certified:

O. JOE. HOWARD, *Sec'y Sou. Nurs. Assn.*

PROPAGATING FROM SELECTED TYPES FOR HARDINESS

*Read by William Harry Kessler, Landscape Architect,
Birmingham, Ala., Before the Meeting of the Southern
Nurserymen's Association, Atlanta, Georgia,
August 29th and 30th, 1917.*

WE are all well acquainted with the fact that certain varieties of trees, shrubs, plants and vines are adapted to restricted areas by reason of differences in climatic soil and situation influences, and that while these varieties may acclimatize themselves in a more or less degree to localities somewhat different than their natural habitat, that occasionally they will be severely injured, if not killed, by extremes of temperature, dryness or excessive moisture. The purpose of this talk is to foster an interest in the study of types of varieties with the idea of breeding them up, or propagating from types that have been bred up or have naturally mutated into individuals that are able to exist in a satisfactory manner in localities more or less foreign to their natural requirements.

The definite producing of kinds of plants adapted to given uses is known as plant breeding. Natural varieties are the result of natural tendencies and laws, and not from the regulated acts of man. The laws of plant inheritance are now beginning to be understood and the result of this knowledge is the production in an orderly way with more or less practical results. Since the discovery of De Vries mutation theory and the Mendelian principles, a great advance has been made in plant breeding, which puts experimentation in this field on a much more sure basis.

The laws of heredity are of primary importance to the breeder, for while it is generally true that like begets like, it is also true that in some instances like produces unlike. It is quite well known that individual plants of the same variety vary in their characters, just as men differ in facial expression. This fact allows for the improvement of classes by selection. All of us have no doubt noticed that in blocks of one variety individual specimens show distinct variation from others growing in close proximity and under the same apparent soil and climatic conditions, possessing peculiarities that may increase their value in beauty of form, color and size of foliage and flowers, productiveness and hardiness. Now

there are two general classes of variations, termed *fluctuations* and *mutations*. Fluctuations are those variations generally due to environment and are not inherited. We all know that variation in habit of growth, productiveness, size and productiveness of flower and fruit, is largely due to richness of soil and climatic influences. Some varieties change their character to such a great extent in different localities as to become very dissimilar, as for instance, the common Red Cedar (*Juniperus Virginiana*) which in the rich, moist soils of the Eastern States, is tall and columnar, while in the dry, sterile, limestone soils of some of the Southern states, it forms a broad and spreading, irregular tree. Changes that are inheritable are termed *mutations*. These being instanced in many of the well known garden forms or *sports* of varieties, and ordinarily reproduce true to type from seed, and nearly always retain their peculiar characteristics when propagated from by means of cuttage, budding or grafting. As is well known by gardeners, these mutations generally appear suddenly and without warning and from causes unknown. They cannot always be produced by hybridization, and one must simply wait and propagate from them when they are recognized.

Now those of us who have been somewhat observant, have noted individual plants in nursery fields or elsewhere growing in close proximity to others of the same variety, and apparently under the same conditions, that show very distinct difference in hardiness or ability to stand extremes of heat, cold, dryness or excessive moisture. Sometimes, of course, this may be due to different growing conditions that cannot be distinguished, but in many instances it is the result of a mutation first showing itself in the individual under notice, or the result of propagation from a mutated parent. Therefore, if such a plant, showing unusual hardiness, is propagated from, there is no doubt that its offspring will inherit its hardiness, especially if the propagation is by means of cuttage, budding or grafting.

Where the method of propagation is by seedage this cannot be so sure, as the blossoms of the parent may have become cross-fertilized with the pollen from a plant of different characteristics, resulting in a different form or hybrid. Another method of increasing hardiness, as we are all probably well aware, is the grafting or budding of a more or less tender variety on the root or stock of a hardier sort, as in the case of grafting Lilacs on *Ligustrum ovalifolium*, Tea, Hybrid-Tea and Remontant Roses on Manetti and Rugosa Stock, *Ligustrum Nepalense*, *Ligustrum excelsum superbum*, *Ligustrum marginatum aureum* and *macrophyllum* on the more hardy *L. ovalifolium*. It has been noticed that *Ligustrum coriaceum lucidum*, is more hardy than *L. Nepalense* or *L. Japonicum* in most localities. Now *L. coriaceum* appears to be a hybrid between *L. coriaceum Nepalense* and *L. Japonicum*, and if this be conceded we have here an instance of the hybridization of two distinct varieties producing offspring of greater hardiness and distinctive character.

There is great room for improved varieties of increased hardiness, or types of greater hardiness, especially in the South. For we have a number of varieties adapted to the South that are hardy much farther north, where the more continuous or even seasons affect their growing and dormant periods in a uniform manner, while in the South

occasional warm seasons in winter induce the rise of sap and produce a soft condition in the plant, and being followed by freezing temperatures result in severe winter killing or injury. Therefore, it would seem that by the selection of types of varieties that harden off early and have a tendency to remain dormant until they are safe from being injured by late frosts, the offspring would be more adapted to withstand our peculiar winter seasons to better advantage.

Last winter in the South was a very disastrous one, especially in some localities where warm rainy seasons occurred during the winter. In the Birmingham district nearly all of the large specimens of oriental arborescences such as *Biota aurea pyramidalis*, *Biota aurea conspicua*, and *Biota aurea nana* were badly injured or killed outright, which is the first time this has occurred to my knowledge. Many other varieties of evergreen shrubs were badly injured or killed, as the usually hardy *Abelia grandiflora*, *Evonymus Japonicus*, *Ligustrum Japonicum*, *Ligustrum Nepalense*, *Ligustrum marginatum* and *L. excelsum superbum*, and nearly all tea and hybrid tea roses, growing on their own roots, and some growing budded on stronger stocks. During this period I made frequent inspection of these varieties on private grounds where two or more plants of the same variety were growing closely together and in nursery blocks, and was strongly impressed with the fact that without apparent reason one plant would be killed and along side another plant hardly if any, injured. Therefore, I would strongly recommend that nurserymen should closely observe plants to determine their comparative hardiness and select the best for propagating purposes. Again I would urge that nurserymen study the science of hybridization with the object of producing new types of varieties of greater value in form, size, color of flower, productiveness and hardiness and I am sure very gratifying results will be obtained.

Notes from the Arnold Arboretum

RHODODENDRONS. Persons who desire to cultivate these plants must remember that Rhododendrons, including all Azaleas, cannot live in soil impregnated with lime. Rhododendrons are not hardy north of Massachusetts, and south of Pennsylvania the summer sun is too hot for them. The range therefore in eastern North America where these plants can be successfully cultivated is comparatively small, but probably the northwest coast of North America from southern British Columbia to northern California is as well suited for these plants as any part of the world, and there can be grown in addition to all the varieties common in European gardens the Himalayan and Chinese species which here in the east can only be kept alive in glass houses, and in Europe thrive only in a few exceptionally favorable places like Cornwall or in the neighborhood of the Italian lakes.

Rhododendrons, although they are moisture-loving plants, do not thrive in undrained positions; they do best in soil in which loam and peat have been equally mixed, although peat is not always essential to the successful cultivation of these plants. They should be planted where the roots of trees cannot take away moisture from them,

and the best position for these plants is on the north side but not too near coniferous trees, as they are planted in the Arboretum. In such positions they are protected from the direct rays of the sun in March and April, for in this climate where the roots are in frozen ground in winter and therefore cannot take up moisture, it is important to reduce as much as possible winter and early spring evaporation from the leaves. It is this evaporation from the leaves of evergreens growing in frozen soil which makes it impossible to keep alive many of them in this country; and this is the reason why it is desirable here to water thoroughly Rhododendrons just before the ground freezes in the autumn. Rhododendrons imported from Europe suffer here from the stock on which they have been grafted. The almost universal custom among European nurserymen is to use *Rhododendron ponticum* as the stock for these plants because it is easily and quickly raised and readily grafted. *R. ponticum* is not at all hardy here, and there is little doubt that our want of success with Rhododendrons imported from Europe is due, in part at least, to the stock on which they have been grafted and that the gradual or sudden death here of large plants which have been uninjured by cold or drought for twenty or thirty years is due to this cause.

The familiar Rhododendrons of New England gardens are so-called Catawbiense Hybrids and were raised in Europe many years ago by crossing *R. catawbiense*, a native of the highest summits of the Appalachian Mountains, with Himalayan species, notably the scarlet-flowered *R. arboreum*. It might be expected that plants obtained from these crosses would be hardy in proportion to the predominance of the American plant but, judging by the color of the flowers, this is not always true. Varieties like *Atrosanguineum*, *Charles Dickens* and *H. W. Sargent*, which have flowers as bright red as those of *R. arboreum*, are among the hardiest of all garden Rhododendrons; but varieties with white or pale flowers are more tender than those with rose pink or purple flowers which most closely show the influence of the Catawbiense parent; and unfortunately the varieties with light-colored flowers marked at the base with large brown or chocolate-colored blotches, like *Sapho*, are not at all hardy here.

The hardiness of these hybrid Rhododendrons can only be determined by trial, although in selecting varieties for trial it is safe to assume that plants with broad leaves resembling those of *R. catawbiense*, like *Everestianum*, *Mrs. C. S. Sargent*, *Roseum elegans*, *Henrietta Sargent*, *Cataw-*

biense album, and all the varieties with light or dark purple flowers are likely to prove hardier than the plants with narrow leaves like *Mrs. John Clutton*. There are, of course, exceptions to such a rule. For example, *Pink Pearl* has broad leaves and is very tender; and *Gomer Waterer*, although it has leaves as broad as those of any of these hybrids, usually suffers in winter and almost invariably loses its flower-buds.

Persons who want to plant Catawbiense Hybrid Rhododendrons should take advantage of the knowledge which has been laboriously and expensively obtained about these plants at Wellesley on Mr. Hunnewell's estate, where Rhododendrons have been tested on a large scale for sixty years, and here at the Arboretum where many of the hardiest kinds raised in England, Germany, and the United States will now soon be in flower.

There are other exergreen Rhododendrons which are not as often cultivated here in Massachusetts as they might be. *R. catawbiense* itself is perfectly hardy and none of its hybrids have handsomer foliage. It grows slowly, however, and never to a very large size, and the flowers are of a disagreeable purple rose color.

RHODODENDRON MAXIMUM, which grows naturally as far north as southern New Hampshire, is a large plant sometimes treelike in habit, with handsome, long, narrow leaves and small clusters of beautiful pink and white flowers. It is the last of the Rhododendrons to bloom here, and the flower-buds do not open until the new branchlets have nearly finished their growth, so that the flower-clusters are a good deal hidden by them.

The varieties and hybrids of the dwarf *Rhododendron caucasicum* bloom before the Catawbiense Hybrids, and the flowers have already faded. The latest of this race to flower, and perhaps the best of them all here, is a low, broad, compact plant with pure white flowers called *Boule de Neige*. This is a perfectly hardy, free-flowering plant which might to advantage be more generally planted in Massachusetts.

FRENCH NURSERY STOCK FOR UNITED STATES

A French Ministerial order of September 17, reported by the Consul General at Paris on the following day, permits the exportation of trees, shrubs, and nursery stock to the usual allied and American countries. This order is in derogation of the embargo decree published in COMMERCE REPORTS for August 29.

BOX BARBERRY

A New Dwarf Japanese Barberry.

Were you to ask the gardener, florist, nurseryman, landscape architect, park superintendent, or the well versed amateur, what was the most needed hardy plant for northern gardens today, the general answer would be to the effect that it was a dwarf hardy shrub suitable for low edge or hedge purposes,—a shrub that would acceptably take the place of the border-box and fill an even wider field of usefulness.

Happenings in horticulture are often of great importance. Nature puts before our eyes now and then rare

natural variations from the commoner types that often go unnoticed, which if duly appreciated, would materially advance our horticulture. It is the discernment of the occasional sensitive mind that has brought to light and to wide usefulness many of the standard plants of today. The true gardener is ever on the watch for something new that may be better than present forms.

Some fifteen years ago, among a bed of many thousand Japan Barberry seedlings, a tiny plant appeared which, as the first season advanced, looked so different

from its comrades as to attract the nurseryman's attention by its tiny, dainty, dark green leaves and its very short internodes. This was the beginning of a plant that, due to the trained eye of the nurseryman who saw its possibilities, bids fair to become known in gardens in many parts of the world.

This, in brief, is the history of the new Box-Barberry being disseminated by its discoverers, The Elm City Nursery Co., who recognized its possibilities and usefulness as well as its rare beauty. Instead of in the future be-

Box barberry themselves. Plants one year old from either hard or soft wood cuttings, can be produced which are amply sizeable for edge purposes. It is probable that plants should be grown one year in nursery rows, however, to produce the class of plants which will be most in demand for low hedge purposes.

It can be easily seen that this new dwarf Box-Barberry can be profitably sold at so popular a price as to warrant its uniform adoption to the uses it is so eminently fitted to acceptably fill. To quote an old nurseryman propagator



Box-Barberry

A new form of Berberis Thunbergi, originating at the Elm City Nurseries, New Haven, Conn.

ing obliged to regret that there is no desirable low edge plant for formal gardens or a low uniform plant suitable for dwarf hedges, the gardener will soon be able to order box-barberry from his nurseryman or florist.

The introducer's plans are to make the first offer of stock of it for propagating purposes to the trade this fall. In the spring of 1919 it will be introduced to the general public. This gives the holders of stock obtained this fall ample opportunity to propagate a good stock of this

of national reputation:

"No one plant has made its appearance in years which bids fair to be more universally useful than this Box Barberry."

Another: "The whole country has been a long time waiting for this very plant."

Still another: "Had we been able to furnish this plant for the many demands for a garden edge or a low hedge this last spring, it would have been a God-send to us."

The Japanese Mission while on their visit to Philadelphia paid a visit to the Japanese Gardens on the estate of the late John T. Morris, Chestnut Hill.

It must have been almost like a visit home for there are sections of the grounds laid out in the most approved Japanese style, miniature mountains, lakes, water falls, cliffs, in fact a section of Japanese scenery reproduced in miniature by Japanese landscape gardeners. Reproduction or imitation in miniature seems to be the theme of Japanese landscape gardening, at which they excel.

They seem to have a wonderful sense of proportion and where the American's aim is to make a plant grow quick, their object is to dwarf and make it grow slow. The writer saw the Japanese gardener working on a pine tree not over six feet high for more than a week, tying in and training every twig, just for the purpose of creating an artificial perspective. A safe estimate would be that he added 100 years to the appearance of the tree.

It is truly a fascinating study but the practice of which hardly fits the American temperament.

Mr. Morris was a great traveler and much interested in Japanese plants and gardens. It is safe to say the gardens he founded have perhaps next to the Arnold Arboretum the finest collection of outdoor plants in America.

WANTED—In retail Nursery Office, middle age man, who can operate typewriter. Moderate salary to start, splendid chance for advancement. Reply to

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Boxwood Edging, 4 - 6 - to 8 Inch

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As I want to retire from business, I will sell besides the land, all nursery stock and implements. This nursery is located in the Northwest in one of the best business localities of this country. Address:

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March, 1902.

October, 1903.

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You never delivered **finer** stock nor received quicker service than you get from yours truly.

WICK HATHAWAY, Madison, Ohio.



WANTED Some nursery firm believing that instead of importing his nursery stock, such as Roses, Azaleas, etc., etc., these can be grown in America just as good if only the right man takes charge of it.

ADVERTISER a Holland wholesale grower of nursery stock having visited American nurseries often, wishes to communicate with some progressive firm who is willing to start or increase the growing of these "Holland" items and where he can find a managing part with view of partnership.

It will be wise policy to be ready when possible America prohibit import of nursery stock.

Address: MANAGER care "The National Nurseryman," Hatboro, Pa.



Two horses will do the same work with this digger as twelve horses do with those now in use. Write for descriptive circular with testimonials.

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PRACTICAL LANDSCAPE GARDENING, by Robert B. Cridland, Landscape Architect. This is a work designed to aid the amateur with practical suggestions as to how to locate the house, arrange and construct walks and drives, grade and make lawns, arrange ornamental plantings, design and plant flowers and rose gardens and perennial borders, rock and wild gardens. It contains 91 photographs, 67 sketches and 29 plans, 19 of which are planting plans with planting keys. The author takes up in a simple, logical way all the elements that enter into the beautifying of properties. It is an entirely different book from any landscape treatise previously written. It is the first practical book of its kind.

Cloth bound, enamel paper, 276 pages, size 6 by 8 inches. Price \$1.50, postage 15c additional.

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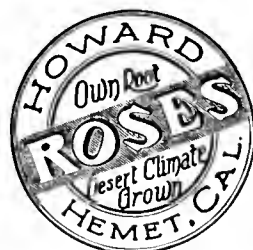
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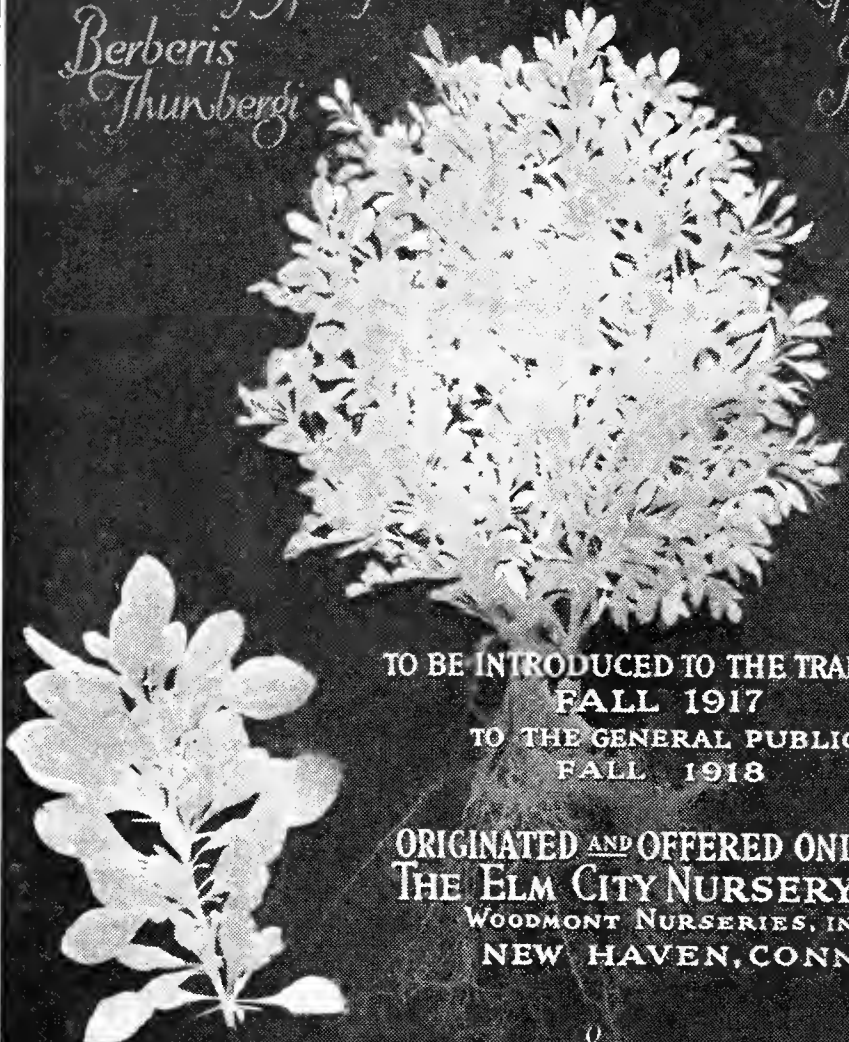
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15,000	10 to 12 ft., 1½ to 1¾ in.	5,000	3 to 3½ in.
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20,000	6 to 12 in.	10,000	18 to 24 in.
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THE NATIONAL NURSERYMAN



NOVEMBER 1917

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

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BERBERRY THUNBERGII

HYDRANGEA P. G.

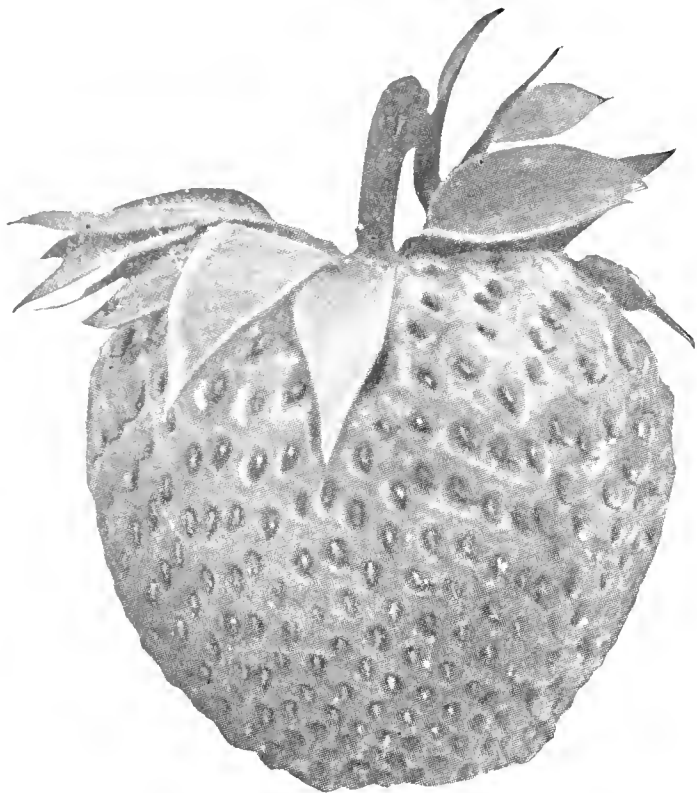
PLANTING STOCK, ETC.

Pleased to price your list of wants.
Shipping service of the very best.



C. R. BURR & CO.

Manchester, : Conn.



Strawberry Plants

FROM NOVEMBER FIRST TO MAY FIRST

We supply leading fruit growers, nurserymen and dealers with fine strawberry plants.

Our plants are healthy, heavily rooted, and guaranteed *true-to-name*.

We grow all the leading standard and everbearing varieties.

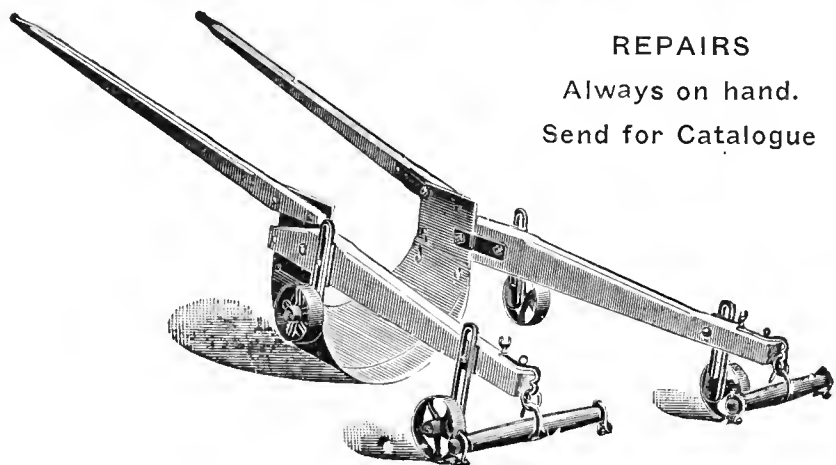
Get in touch with us regarding your supply for next season. Shipments made to you or direct to your customers. Packing unsurpassed.

The W. F. ALLEN CO., 100 Market Street, Salisbury, Maryland

1857

1917

BRAGG'S COMMON SENSE TREE DIGGER



REPAIRS
Always on hand.
Send for Catalogue

Digger gets All the Roots at the rate of Twenty to Forty Thousand trees per day, and only needs same power as plow.

L. G. BRAGG & CO.
KALAMAZOO, MICH.

FRENCH FRUIT STOCKS

Offered for Account of

VINCENT LEBRETONS NURSERIES
Angers, France

December or February shipment from France

Mahalebs, Myrobolans, Mazzards, Apple, Pear and Quince Stocks, etc. Also a full line of Ornamentals in lining-out sizes

Advance prices now ready for Nurserymen.

HOLLAND STOCK

Norway and Schwedler Maples and other deciduous trees, Tree Roses, Boxwood, Koster Blue Spruce, Rhododendrons, Evergreens, Herbaceous Perennials, etc.

HARDY JAP. LILY BULBS

Such as LILIAM AURATUM, RUBRUM, ALBUM, MAGNIFICUM, Melpomene, Roseum. Import prices. Case lots.

Fall or Spring Shipment

Write for prices

McHUTCHISON & CO. THE IMPORT HOUSE
95 CHAMBERS ST., NEW YORK

PAINESVILLE NURSERIES

ORNAMENTAL TREES

Deciduous and Evergreen

In great varieties and largest quantity.

SHRUBS

Full line of all leading types and varieties in use.

ROSES

Usual S. & H. quality; most varieties. Inquiries should state quantity of each variety desired.

HARDY PERENNIALS

Not too late to plant the sturdier kinds. We are booking Perennial stock by express only.

FRUIT TREES

Apples Pears
Plums Cherries
Peaches Etc.

—We are heavy growers and can make interesting quotations on your want lists.

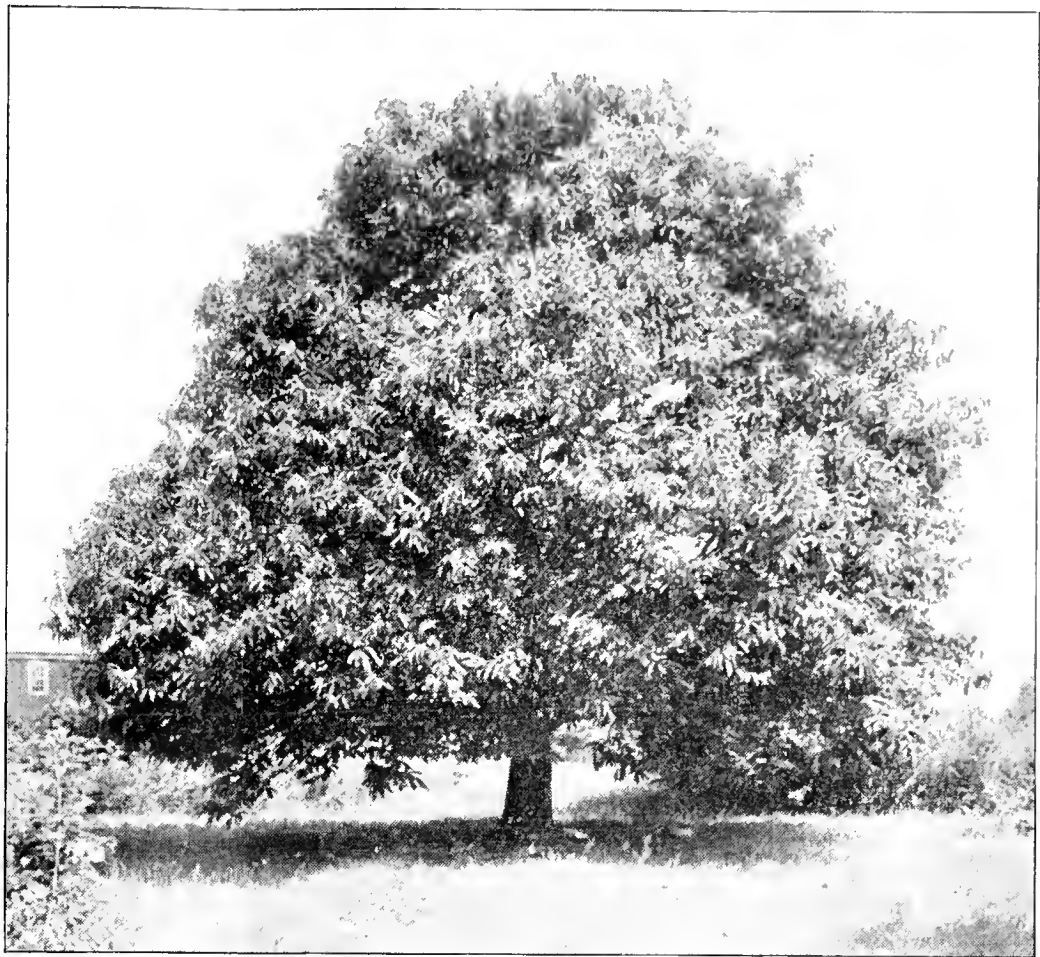
SMALL FRUITS

Grapes
Currants
Gooseberries
Raspberries, Etc.

—In quantity—in quality and at right prices.

LET US

have a chance to quote on your entire wants.



AMERICAN CHESTNUT



THIS AND SIMILAR BLOCKS OF FRUIT TREES, SOON IN CELLAR

THE STORRS & HARRISON CO.

NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

When writing to Advertisers please mention the National Nurseryman.

J. & P. Preferred Stock.


J. & P. Preferred Stock.

Not How Cheap, But How Good

is our slogan. It is our ambition to grow and sell the best there is in our lines,—because quality goods sell themselves, and at living prices. It isn't necessary to be always cutting under the other fellow.

We grow a pretty complete assortment but our specialties are—

Field-grown Roses	Ampelopsis Veitchii
Clematis, Large-flowering	Clematis Paniculata
Tree-form Hydrangeas	Tree-form Lilacs
Shrubs	Perennial Plants
Paeonias	Shade Trees

 Note: We sell to the trade only. Have no retail business of our own. Our trade customers get and are entitled to our very best stock and very best attention.

Jackson & Perkins Company

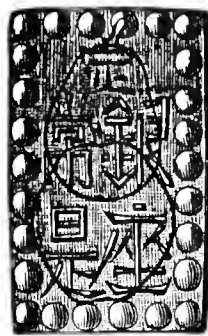
NEWARK

NEW YORK

J. & P. Preferred Stock.

J. & P. Preferred Stock.

Heikes—Huntsville—Trees



Established 1872

1500 Acres

**FRUIT TREES
ROSES and other
ORNAMENTALS**

For the wholesale trade.
All of our own growing.

**HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.**

Hill's Evergreens

You can work up a good profitable trade in Evergreens if you have the right kind of stock. Our main specialty for over half a century has been the propagation of young Evergreen stock for the wholesale trade in immense quantities at low prices.

We have all the leading varieties in small sizes, for all purposes, suitable for lining out to grow on for your trade.

Nurserymen who have heretofore depended on Europe for their young Evergreen plants can now be assured of a good reliable source of supply right here in America, and we solicit the opportunity of quoting on your requirements.

"Made in U. S. A." and "American Stock for American Planters" should, from now on, more than ever, be the slogan of American Nurserymen for it means "money saved in the long run" to start with nice, strong, sturdy, vigorous American-grown stock which has been produced right here in America.

YOU want to keep posted on Evergreens;

WE want to become better acquainted with you;

Let's get together.



The D. HILL Nursery Co., Inc.

Evergreen Specialists

LARGEST GROWERS IN AMERICA

Box 401

Dundee, Ill.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of
Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX
and
HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

70 Years

1000 Acres



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE

THE

North-Eastern Forestry Co.

CHESHIRE

...Connecticut...

OF OUR

Fall Trade List,

The Editors say:

"Positively the finest thing of the kind ever issued."
"Carries a note that rings true."
"Magnificent; distinctive and in a class by itself."

A Maker of Fine Catalogues says:

"The best-looking, best-devised and most attractive wholesale list I have ever seen."

Nurserymen say:

"Fine," "Superb," "Great," "Foolish waste of money," "Does it pay?" "If the stock is half as good as the pictures, we want some of it; here is an order." It is possible that in our new business, we may have failed to get the names of all our old friends on our mailing-list and that there may be others who would like copies of our list. They will be very gladly sent on request. The list is attractive, because it consists almost altogether of pictures of the stock offered for sale and because it is good stock; the list is expressive of the quality of the goods and service offered by a new wholesale firm catering exclusively to The Trade, and along modern business lines. May we send YOU a copy?

PRINCETON NURSERIES

November first.

At Princeton, in New Jersey.

J. H. Skinner & Co.

Topeka, - Kansas



Apple Seedlings,

Japan Pear Seedlings

Forest Tree Seedlings—Catalpa, Elm, Maple, Mulberry and Locust.

Fruit Trees—Apple, Cherry, Pear, Peach and Plum.

Rhubarb, Divided Roots, True Myatt's Linneaus

Grapes

Shade Trees

Flowering Shrubs

Paeonias

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

Rawhide Brand of Shipping Tags and Tree Labels

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

ORNAMENTAL

TREES, SHRUBS, VINES, EVERGREENS
HARDY HERBACEOUS PLANTS

225 Acres

Entirely devoted to the growing of the
best quality of ornamental nursery stock.

WHOLESALE ONLY

We also grow the "unusual" things, you
cannot find elsewhere.

Small Trees and Shrubs for
Planting in Nursery Rows.

We shall have our usual supply for Spring
delivery. Catalogue ready January first.

RAFFIA HEADQUARTERS

Supply of our usual brands on hand at
all times.

Thomas B. Meehan Co.,
WHOLESALE NURSEYMEN
Dresher, - Penna.

Planting Stocks

They should be ordered NOW for timely delivery. No trouble about arrivals from France; the tonnage required for our men and materials sent "over there," insures ample space returning. Prices being practically the same, it is a question of quality and grades and packing and service. We merely remind our customers of the way their previous orders have been handled; those who have not yet tried us can get satisfactory assurances as to our goods and service from the one hundred sixty leading American nursery firms we have supplied. Glad to put YOU in touch with our satisfied customers in YOUR own state. Mr. Delaunay's complete list will be sent on request. But—get that order placed!

John Watson & Company

NEWARK - NEW YORK

November First

For Fall of 1917

*WE will have our usual line
of Ornamentals, Shade
Trees, Perennials, Apple,
Plum, Cherry, Peach, etc.*

C. M. Hobbs & Sons

Marion County

Bridgeport, - - Indiana

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa.

STARK BRO'S

Extra Heavy 2-Year Grape

Leading varieties, especially Concord. Strong tops and big roots, greatly preferred by the Retail Trade. Our heavy Extra No. 1 2-year grades will please your customers and cost no more than the ordinary No. 1 grade usually offered.

The vines we grow in Erie Co., Pa., in the fine grape soil along the South shore of Lake Erie, are unsurpassed.

In addition to Concord, we will have Moore Early, Niagara, Worden, and other standard varieties on which we will be pleased to quote.

Special prices for early buyers—send us your want lists.

Stark Bro's Nurseries LOUISIANA, MO.

Grape Nurseries in Erie Co., Pa. Best Grape Soil in America

The Best In Nursery Products

We carry a full line of fruit and ornamental trees, evergreens, shrubs, etc. Send us a list of your wants.

A FEW SPECIALS

Oriental Planes from 1¼ to 3 inch caliper. A large stock of Sugar Maples, American Elms, Beech grafted River's, and Fern-leaved, Double Flowering Japan Cherries, Prunus Pissardi, Flowering Apples, Flowering Peaches, Magnolia Tripetela, Japan and American Judas, Japan Walnuts, American Arbor Vitae, Hemlock and Norway Spruce, Altheas, Forsythias, Philadelphus, Viburnum Plicatum, Weigela, Eva Rathke, etc.

Downing Gooseberries, 2 years No. 1.

HOOPES BRO. & THOMAS COMPANY

THE WEST CHESTER NURSERIES

Established 1853 West Chester, Pa. Incorporated 1907



BERRY'S Wholesale Nursery

Small fruit plants in variety; rhubarb; horseradish; California Privet; Barberry Thunbergii; Hydrangea P. G.; Spiraea Van Houghti; Peonies, etc.

See list before placing your order.

P. D. BERRY,

Dayton

Ohio

We Are Prepared To Supply The Trade

ROSES, Field-grown, own roots and budded.
ABELIA GRANDIFLORA. Transplanted, field-grown.
BERBERIS JAPONICA.
AZALEA INDICA (Home-grown)
GARDENIAS.
ENGLISH LAUREL.
MAGNOLIA GRANDIFLORA.
MAGNOLIA FUSCATA.
OLEA FRAGRANS.
CAMPHOR (pot-grown.)
LIGUSTRUM JAPONICUM, LUCIDUM, NEPALENSE,
and other good varieties. fine bushy plants.
SATSUMA ORANGE. Field-grown, budded on Citrus
Trifoliata.
BIOTA AUREA NANA (Berckmans' Golden Arbor-
vitae)
BIOTA AUREA CONSPICUA.
RETINISPORA. In variety.
JUNIPERUS. In variety.
WISTARIAS. Grafted, best sorts.
APPLES.
JAPANESE PERSIMMONS.
ENGLISH WALNUTS.
MULBERRIES.
SPIRAEA THUNBERGII. A beautiful lot of stocky
plants.

A fine stock of Hackberries, Koelreuteria, Tulip Poplar, Magnolia Purpurea, Texas Umbrella, Sycamore and Elms.

Send us a list of your wants and let us give you quotations.

P. J. BERCKMANS CO., Incorporated
Fruitland Nurseries, Augusta, Georgia

STRAWBERRY PLANTS

All the leading Standard and Everbearing varieties. Have a nice stock of PROGRESSIVE, SUPERB AND AMERICUS, true to name. My plants are well-rooted, strong and healthy. They are pleasing a large number of Nurserymen and Dealers and they will please YOU and YOUR CUSTOMERS if you use them. IT WILL PAY YOU TO USE THEM. Will ship to you or direct to your customers. Send your list for prices.

LEAMON G. TINGLE, 165 Railroad Ave., Pittsville, Md.

For FALL 1917 -- SPRING 1918

5,500 CATALPA BUNGEII, 1 yr. heads:
3-4 ft., 4-6 ft., and 6 ft. up.
20,000 CAROLINA POPLAR, 6-8 ft., 8-10 ft. and 10-12 ft.
120,000 BARBERRY: Thunbergii, Purple-leaf and Vulgaris, 2 and 3 yr. transplanted; 12-18 in., 18-24 in., 2-3 ft.
170,000 PRIVET: California, Ibota, and Amoor River, 2 yr., 12-18 in., 18-24 in., 2-3 ft.
Also a large and complete line of high quality Nursery stock for the Wholesale trade. Send for trade list.

T. W. RICE, GENEVA, N. Y.

BUNTINGS' NURSERIES

G. E. Bunting & Sons, Props.
SELBYVILLE, DELAWARE.

Offer for fall 1917 Spring 1918

Good stock of

APPLE TREES
STRAWBERRY PLANTS 60 VARIETIES
ASPARAGUS ROOTS 1 and 2 yr.
CALIFORNIA PRIVET 1 yr.
BARBERRY THUNBERGII 1 yr. and 2 yr.
SPIREA VAN HOUTTE 2 yr. and 3 yr.
DOROTHY PERKINS ROSES 1 and 2 yr.

Before placing your order write us for trade list.

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Fall 1917

GRAPE VINES—One and two years old. Varieties largely Moore's Early, Concord and Niagara.
Also Scarlet or Crimson Clover Seed and Cow Peas. Free from weed seeds, all recleaned and guaranteed first class.

Correspondence solicited. Price list upon request.

CHAS. M. PETERS

P. O. Address, Salisbury, Wicomico County, Md., R. F. D. 3
Long Distance Phone and Telegraph, Salisbury, Md.

The Framingham Nurseries

200 Acres
High Grade
Trees, Shrubs,
Evergreens,
Vines, Roses,
Etc.



Fine Stock
of
Rhododendrons
Kalmias
and
Andromedas

Send for Price List

W. B. WHITTIER & CO.

FRAMINGHAM, MASS.

We have a splendid stock of Grape Vines

and other small fruit plants for the Nursery trade, graded up to the highest standard and sure to please you.

Give us a trial order, send in your list now for quotations

A. R. WHEELOCK

SUCCESSORS TO
WHEELOCK & CONGDON

North Collins, N. Y.

PAEONIES, Standard Varieties

30 Acres for Commercial Purposes

Write for Prices

Gilbert H. Wild

SARCOXIE, - MISSOURI

REMEMBER!

If its a hardy perennial or so called old fashion flower worth growing, we have it in one shape and another the year round. We have the largest stock in this country, all Made in America, and our prices—

Why say more here. Send for our Wholesale price list of varieties and benefit from the opportunities this affords you.

Our motto: "Maximum Quality, Minimum Cost."

Address, **R. W. Clucas, Mgr.**
Palisades Nurseries, Inc. Sparkill, N. Y.

You can save Time and Money

If you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

Sarachan & Rosenthal

64-66 Hanover Street

Rochester, - - New York

Vincennes Nurseries, W. C. REED, Prop.
 VINCENNES, - - INDIANA

Prepare for Fall by securing the best Cherry to be found
 Our blocks of Cherry are the largest in the U. S. and quality the best. While the U Boats have been sending Mahalebs to the bottom the past two years, we have been fortunate in securing our usual supply and will have a splendid lot of trees to offer in the following:

CHERRY TWO YEAR general list of varieties

CHERRY ONE YEAR 11-16 up Sweets and Sours

PEACH ONE YEAR leading varieties

PLUM Japans, European and Hansen Hybrids

COMPASS Cherry and Apricots

APPLE leading varieties in connection with other stock only

Grafted English Walnuts and Northern Pecans

Special prices to car lot buyers on large orders

WE OFFER

Grape Vines, Currants and Gooseberries

in all varieties and grades

—also—

Grape and Currant Cuttings and Light

Grade of Vines for Lining Out

in Nursery Rows

WRITE FOR PRICES

F. E. SCHIFFERLI, Fredonia, N. Y.

We are now ready to quote lowest prices on
**FRUIT, SHADE AND ORNAMENTAL
 TREES, SHRUBS, EVERGREENS,
 VINES and HERBACEOUS
 PLANTS**

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
 Sparta, Ky.

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

We offer for Fall 1917

250,000 PEACH, 40 Varieties, 1 year buds

CALIFORNIA PRIVET, 1 year and 2 year

ASPARAGUS, 1 and 2 year

DOWNING GOOSEBERRY PLANTS, 2 year

BARBERRY THUNBERGI, 2 and 3 year transplanted

Can supply the above stock in car load lots or less, also, have a large stock of Rhubarb, Cumberland Raspberry Plants, Spireas, Deutzia Assorted, nice specimen plants. Evergreens, Horse Chestnut, N. Maple, Lombardy Poplar and Planes, etc.

We will make attractive low prices for early orders
 Send List of Wants

For FUMIGATION With
HYDROCYANIC ACID GAS

"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.
 100 WILLIAM ST. - NEW YORK, N. Y.

WOOD LABELS

For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

Dayton Fruit Tree Label Co.

South Canal St., Dayton, Ohio

CONSERVE

Save money—save time, trouble and worry.

Use American grown Apple Stocks

WE can furnish the very best grades at very reasonable prices. Do not waste money on foreign freights, insurance, boxing, duties etc. We make no charge for boxing or packing and we guarantee safe arrival.

Let us know the grade and quantity you use and we will make you a price. We will be glad to send you samples if you are not acquainted with our high standard of grades.

F. W. WATSON & CO.

Topeka, - Kansas



N. G. B. DEXTER

Established 1820

DEXTER GRAFTING TWINE

Especially prepared for Nursery
and Greenhouse Grafting

Put up in boxes containing 20 balls. Also furnished on cones and tubes unbleached. This yarn is so wound that it can be readily soaked in hot wax and so twisted that it is strong enough to wrap without breaking, yet it is easily broken when the winding is completed.

We also make a special twine on tubes, balls and cones for the Reed Bell Graft Wrapping Machine. Samples and prices furnished on request.

DEXTER YARN COMPANY

PAWTUCKET, R. I.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK
The National Nurseryman Publishing Co., Incorporated

Vol. XXV.

HATBORO, PENNA., NOVEMBER 1917

No. 11

FLOWERING HEDGES



A Flowering Hedge of American Pillar Roses

HEDGES may be formed of almost any of the flowering shrubs of suitable habit, but it will depend entirely on the after care whether they be a success or not. Correct pruning is essential to a good display of flowers and, of course, pruning that

will keep the plants uniform and hedge-like.

Spiraea Van Houttei, *Deutzia gracilis*, *Rosa rugosa*, *Pyrus Japonica*, *Hydrangea paniculata grandiflora* are among those oftenest seen as successful.

Take for instance the pruning of *Spiraea Van Houttei*.

When planted as a hedge, the proper time to prune is just after it has done flowering, then, instead of using the hedge shears as you would on privet, the old wood should be pruned out right from the bottom or as near to the ground as possible, without sacrificing too much new wood in the operation. After this is done it is in order to clip off the ends of long ragged shoots so as to bring all the plants to as much uniformity as possible but keep in mind that the growth of the current year bears the flowers the following spring.

These remarks apply equally to the *Deutzia* and *Rosa rugosa*, but the *Pyrus japonica* flowers on the old wood, so more liberty can be used in pruning the hedge into shape.

The *Hydrangea p. g.* differs again because of the fact that it flowers on the new wood so may be pruned into shape early each spring. The best bloom will be got by pruning back to one or two eyes of last year's growth. This is also true of the *Althaea* which makes a very satisfactory flowering hedge.

The illustration shows a hedge of the American Pillar Rose. There are some beautiful effects to be seen where this type of rose has been used to form hedges, as a rule the best results are obtained where they are planted about six or eight feet apart along a fence and the canes tied in. They are usually so vigorous growing that about two years is sufficient to completely cover the fence. Dorothy Perkins is one of the prime favorites for this purpose but all the groups of roses usually classified as Wichuriana hybrids are suitable for the purpose.

Those kinds, such as the old Crimson Rambler, Silver Moon, American Pillar, that will produce strong self-supporting canes, may be grown in hedge form without the fence for support but it is only where ample room may be allowed for full development of the long canes that full justice is done to this kind of hedge.

As with the spring flowering shrubs mentioned above, the best time to prune these rose hedges is immediately after flowering, cutting out the old canes.

The Baby Rambler type of rose, due to their free flowering qualities, suggest themselves as an excellent hedge plant but one seldom sees one giving very satisfactory results due to improper pruning and care.

A NEW TYPE OF ABIES BALSAMEA

Mr. A. H. Hill, of The D. Hill Nursery Co. at Dundee, Illinois, has just returned from a trip through northern Wisconsin, where he succeeded in locating a long needled and large coned type of *Abies balsamea*. This is a form that Prof. Sargent of The Arnold Arboretum, is exceedingly interested in, and that he has been trying to locate in the wild state for some time.

The type is noticeably different from the common Balsam. It has a darker and richer coloring, the needles are longer, and the cones are considerably larger. Another marked characteristic is that the trees hold their lower branches, and even the very old trees are perfect specimens.

Prof. Sargent calls this type *Abies balsamea macrocarpa*, and describes it as being an exceptionally beautiful and desirable type of Fir.

PRESIDENT STARK TO REMAIN IN OFFICE

At the instigation of J. R. Mayhew, Vice-President of The National Association of Nurserymen, the Executive Committee has refused to accept the resignation of President Stark. Therefore, Major L. C. Stark remains President of the American Association of Nurserymen and Vice-President Mayhew will act in his stead until such times as Major Stark can take up his official duties.

Fort Sill, Okla., October 9, 1917.

My Dear Mr. Mayhew:—

After many wanderings and much forwarding your letter finally reached me after going from Washington to Virginia and back again and on to Louisiana, then here where I arrived over a week ago.

I cannot begin to tell you how much I appreciate the spirit which prompted you to urge that I continue to hold the office of President. It hardly seems wise, but if the Executive Committee has decreed otherwise I can only accept and say to you and our Executive Committee that this honor you pay me not only touches my heart to the very depths, but it is to me a splendid evidence of the true Americanism and patriotism of the big hearted men who predominate in the great Association of which we are members—it is, as I feel, rather a tribute to the uniform I wear and the flag I leave you to serve—to our Country.

Such incidents and examples are contagious—they breed patriotism. Hence more for patriotic than personal reasons I am glad to accept the generous action of yourself and the Executive Committee. May we all meet together again when it is over, over there.

I'll be here on special artillery work till about December 15th, then to Virginia and on to France about February or March I suppose—no one knows. I leave feeling the duties of the President are in better hands than mine, so the Association affairs will not suffer.

I start my aeroplane and balloon work next week. It is now comparatively safe, however.

May God bless you and yours. With best wishes, I am

Most sincerely,
(Signed) LLOYD STARK.

Mr. Stark's address is
Major Lloyd Stark,
"School of Fire,"
Fort Sill, Okla.

W. T. Hood, of W. T. Hood & Co., Richmond, Va., writes: "We are busy getting ready for the fall business, which is about the same as we had in the fall of 1916. Due to the shortage of labor, however, we hardly know how we are going to get through. On account of the DuPont plant near Petersburg, and the manufacturing of shells in Richmond, there has been no surplus help available for nursery work.

Weather conditions have been good, trees have ripened up well, and we have had the tree plow running every day since September 27th. Recent rains have brought the ground in fine condition for digging."

Deans of the Nursery Business

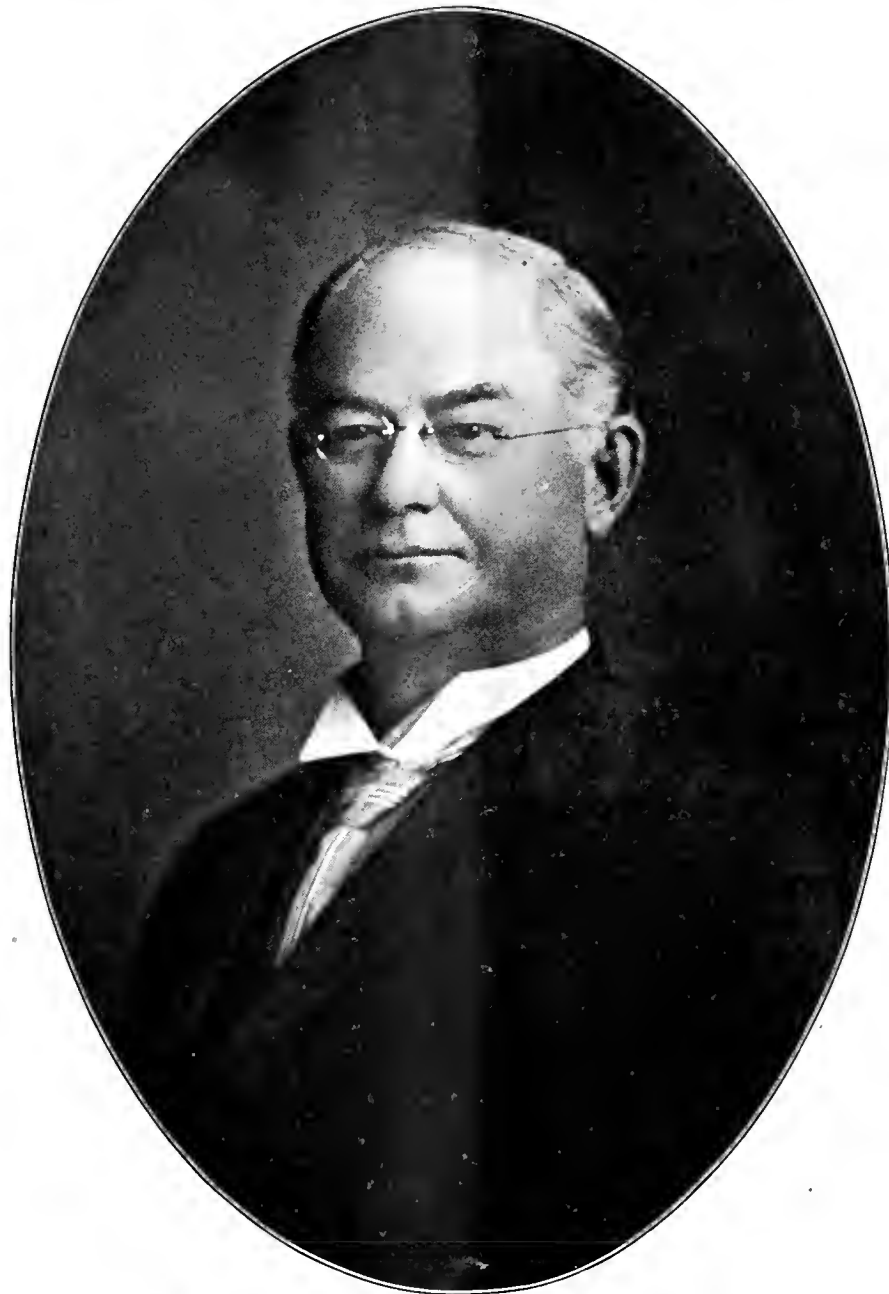
C. M. Hobbs, the head of the firm of C. M. Hobbs & Sons, began his career at Paoli, Orange County, Indiana, July 20th, 1847.

Common school advantages were poor at that date. He was fortunate in having a few terms of schooling at Blue River Academy, a prominent Friends' school, near Salem, Ind. His mother was a lover of out of doors and was especially fond of the garden and the flowers. The subject of this sketch cannot remember when it was not a pleasure to assist his mother in the garden.

Near Blue River Academy were two small nurseries, that of Abram Trueblood, known as the Salem Nursery,

Hobbs formed a partnership and took up the business, developing gradually the largest nursery interest in the state. As a firm, both took an active part in the American Association of Nurserymen. They attended the first regular meeting of that body. Mr. Albertson was president of the convention in later years and served on important committees. Mr. Hobbs served as vice president at different times and on important committees.

This firm has never missed having some one in attendance annually from the first meeting held by the society. In 1907 Mr. Albertson sold his nursery interest to C. M. Hobbs and removed to Whittier, California, where he is



C. M. Hobbs, Senior member of the firm of C. M. Hobbs & Sons, Bridgeport, Indiana.

and that of Oliver Albertson, known as the Canton Nursery. Mr. Hobbs' first experience in the nursery, was following a winter's term of school. The spring and summer he was employed in the Salem Nursery,—the following winter in school and the following summer traveling salesman for the Canton Nursery. This alternate attending school and working in the nursery and selling nursery stock continued for three or four years. In 1875 Oliver Albertson removed to Bridgeport, Indiana, establishing a small nursery and fruit farm, Mr. Hobbs acting as foreman. In 1876 he was married to Anna M. Albertson, daughter of Oliver Albertson. Oliver Albertson deceased 1879. A year later, his son, Emery Albertson and C. M.

engaged in growing citrus fruits. C. M. Hobbs took in his two sons, Oliver and Harry, and formed the company of C. M. Hobbs & Sons. This company owns 312 acres of land devoted to growing nursery stock.

In recent years they have been increasing their planting of shade, evergreen shrub and hardy perennials. Located only six miles from the limits of Indianapolis, gives them a good home market for shade and ornamental stock. Mr. Hobbs, Sr., has been actively interested in the horticultural work of the state for more than half a century. Was secretary of the State Horticultural Society for a number of years and its president for nine years. He is also interested in several large commercial peach and

apple orchards in southern Indiana and other parts of the state.

He is serving his eighth year as trustee of Purdue University. At 70 he still keeps in touch with horticultural interests, but feels he has served his day and generation and that younger and more active hands must now take up the work.

Mr. Hobbs says he has very pleasant memories of some of the early and older members of the American Association of Nurserymen, Messrs. Storrs, Harrison, Franklin Davis, Barnes, Chases, Manning, Albaugh, Augustine, Berkman, Meehan, Hubbard, Josselyn, Moody, Wm. Parry and a host of others, most of whom have passed to the beyond.

He is pleased to see that the younger generation of nurserymen are organizing the association more along practical business lines, which in the end will bring great good to the craft.

PACKING AND STORAGE HOUSES OF THE THOMAS B. MEEHAN CO., BURNED TO THE GROUND

On Saturday night, October 29th the packing and storage houses of the Thomas B. Meehan Co., Dresher, Pa., were struck by lightning and burned to the ground.

The fire occurred about 11 p. m. and although the fire companies from the surrounding country quickly responded to the alarm, the fire made such headway they could do little but prevent it spreading to the offices and nearby buildings.

The buildings, covering about an acre of ground, and contents are a total loss and include considerable machinery, tools, raffia, several carloads of stock and incomplete orders. The loss being estimated at about \$10,000.

The buildings and contents were covered by insurance.

Before the embers had cooled Mr. Meehan was busy on plans for a new building and apart from a little delay in connection with the orders in process of filling business will go on as usual as no records were destroyed.

Raleigh, N. C., October 4th, 1917.

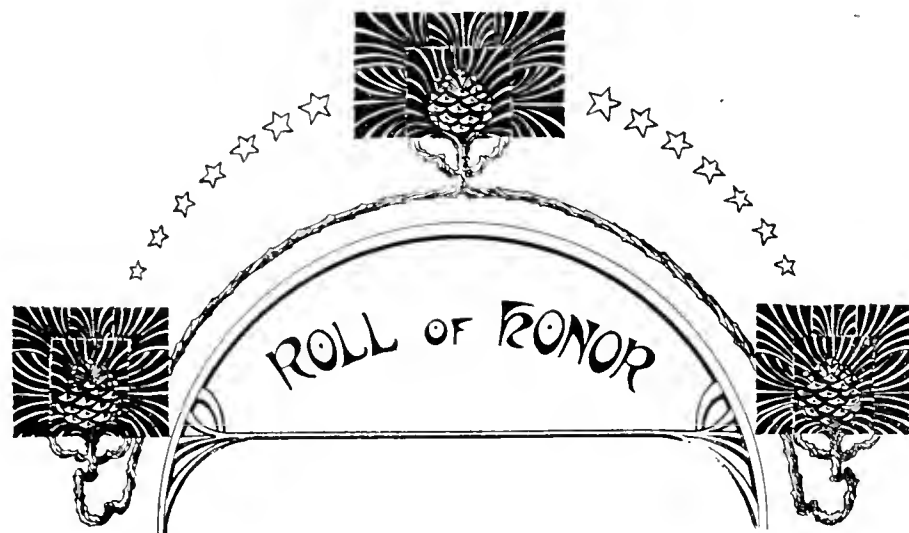
Mr. O. Joe Howard, Secretary,
Southern Nurserymen's Association,
Pomona, N. C.

Dear Mr. Howard:

I am certainly glad to see your resolution regarding "Unethical Business Practices" in the last number of the National Nurseryman. I believe this resolution, if followed out to the letter, will do a great deal towards purging your association of undesirable members and of letting unprincipled nurserymen see that they cannot remain in an association of reputable nurserymen unless their methods are above suspicion. I hope that your association will have the back-bone to see that this resolution is carried out to the letter. If so, I feel sure that it will result in great good to the horticultural interests of the south.

Very truly yours,

State Horticulturist.
(Signed) W. N. HUTT,



IT is the purpose of the National Nurseryman to publish a roll of honor consisting of the names of those nurserymen serving in the United States army in the present war. We shall appreciate it if our readers will send us their names and photographs if possible.

Charles R. Smith, Aviation Section of the Signal Reserve Corps, Aviation Camp, San Antonio, Texas.—Smith Bros. Nursery Company, Concord, Ga.

Stuart Perkins, Wireless Operator, Special Radio School, Cambridge, Mass.—Jackson & Perkins Co., Newark, N. Y.

Wade Muldoon, Sergeant, Headquarters Military Police, Camp Hancock, Ga.—Thomas Meehan & Sons.

George Taylor, Battery "F," 108th U. S. F. A., Camp Hancock, Georgia.—Thomas Meehan & Sons.

Carroll A. Bagby, Capt. U. S. Infantry—New Haven Nurseries, New Haven, Mo.

Oliver W. Bagby, Lieutenant, U. S. Navy—New Haven Nurseries, New Haven, Mo.

Ralph B. Bagby, Lieutenant, 21st U. S. F. A., Fort Riley, Kansas—New Haven Nurseries, New Haven, Mo.

Lew W. Bagby, Lieutenant (Junior Grade) U. S. Navy—New Haven Nurseries, New Haven, Mo.

Paul Rathert, Battery F., 128th U. S. F. A., Ft. Sill, Oklahoma, New Haven Nurseries, New Haven, Mo.

Charles Schwenker, Battery F, 128th U. S. F. A., Ft. Sill, Oklahoma—New Haven Nurseries, New Haven, Mo.

Robert E. Bagby, Cadet, Senior Class, United States Military Academy—New Haven Nurseries, New Haven, Mo.

Harold J. Bagby, Enlisted Medical Reserve Corps—New Haven Nurseries, New Haven, Mo.

Lloyd C. Stark, Major of the Field Artillery, Fort Sill, Okla. Vice-President and a Director of Stark Bros. Nurseries and Orchards Co., Louisiana, Mo. President of the National Association of Nurseries.

Meredith P. Reed, Captain, Sixth Company Section U. S. Officers' Reserve Corps.—Vincennes Nurseries, Vincennes, Indiana.

William Flemer, Jr., F. & F. Nurseries, Springfield, N. J. Private U. S. Expeditionary Force, Ambulance Corps, Battalion No. 23, Section No. 23, France.

Clay M. Stark, Stark Bros. Nurseries & Orchards Co., Louisiana, Missouri. American Field Service. Now in France.

The Texas Nurserymen's Association Annual Meeting

Waco, Texas, September 25th and 26th, 1917.

THE seventeenth annual session of the Texas Nurserymen's Association, met in Waco, Texas, Tuesday, September 25th, with Mr. W. B. Munson, of Denison, President of the Association, presiding.

The invocation was offered by Rev. E. E. Ingram of Waco, following which Mr. Driskill, of the Waco Chamber of Commerce extended to the nurserymen a cordial welcome to the city of Waco. Col. E. W. Kirkpatrick, of McKinney, one of the veteran horticulturists and nurserymen of the State, responded to the address of welcome.

Following this came the annual address of the President who reviewed the work of the past year and expressed some of the future aims of the Association.

The report of the Secretary-Treasurer was submitted by Mr. John S. Kerr, and the President then called for reports of the different committees.

Mr. John S. Kerr, Chairman of the Committee on Publicity strongly recommended the raising of a fund for considerable publicity work to be handled by the association. Mr. Falkner, of Waco, spoke in support of Mr. Kerr's suggestion.

Mr. C. C. Mayhew as chairman of the committee for the Standardization of Plant Names, had with him a copy of the Official Code recently adopted by the American Association of Nurserymen and recommended that the Association adopt the report officially and also that each member secure a copy from Mr. Harland P. Kelsey, of Salem, Mass.

As one result of the Shreveport Yate Case, nurserymen of Texas have suffered the loss of a special rate which had been given them by the Texas Railroad Commission, on shipments of trees balled in earth. Mr. Driskill, at the request of the Association, went into the matter in detail and explained the many complications connected with the securing of the re-establishment of this rate. A committee consisting of Mr. W. C. Griffing of Port Arthur, Mr. Edward Teas, of Houston, Mr. Driskill, of Waco and Mr. C. Sizemore, of Waxahachie, was appointed to work in connection with the Transportation Committee in an effort to secure the re-establishment of this rate.

At the afternoon meeting, after a talk by Mr. Falkner on the work of the Texas Farmers' Congress and a discussion of the advisability of establishing a bureau for the co-operative buying of nursery supplies, the association convened in executive session.

At the evening session an especially interesting address was delivered by Mr. J. R. Mayhew, of Waxahachie, President of the American Association of Nurserymen. Mr. Mayhew told of the plans of the American Association for the coming year and urged that Texas nurserymen should by all means belong to the national association so as to secure the many benefits resulting therefrom.

The last session of the convention was held Wednesday

morning, opening with a paper by Mr. Edward Teas of Houston, on "New Acquaintances Among the Old and New Ornamentals."

Mr. W. B. Lanham, of the Extension Department of the A. & M. College spoke on the relations existing between the work of his department and the work of the nurserymen. He showed how his work was to encourage the orchardists of Texas to plant more trees and take better care of the orchards already growing. One of the facts stated by Mr. Lanham was that 65% of the farms of Texas are without fruit trees of any kind.

One of the most far-reaching results of the Convention was the adoption of the following resolution, offered by Mr. J. R. Mayhew and unanimously adopted by the entire membership.

"Whereas: The interests of the Nurserymen of the Southwest, embracing the States of Texas, Oklahoma, New Mexico, Louisiana and Arkansas and the Republic of Mexico, all because of climatic conditions peculiarly the same, and believing said interests of the nurserymen within this section would be substantially improved through the organization of an association embracing this territory;

"Resolved that the Texas Nurserymen's Association invite the State associations of the above named states, to join with Texas in the organization of an association of nurserymen, to be known as the SOUTHWESTERN NURSERYMEN'S ASSOCIATION and to take the place of state organizations.

"That a committee from this association be appointed to confer with a like committee from states mentioned, whose duty it shall be to prepare constitution and by-laws and do all things necessary to the ends sought under the resolution.

"That when ready to report, a convention of the nurserymen of the Southwest be called to meet in Denison, Texas, or some point to be selected by the Committee, to receive report of the committee, adopt constitution, and transact such other business as may come before the convention."

In line with the resolution, the following committee was appointed: J. R. Mayhew, Waxahachie, John S. Kerr, Sherman, W. C. Griffing, Port Arthur, W. B. Munson, Denison, Texas.

The following officers were elected for the new year:

W. C. Griffing, Port Arthur, Texas, President;

J. M. Ramsey, Austin, Texas, Vice-President;

John S. Kerr, Sherman, Texas, Secretary-Treasurer.

The Association is indebted to the Waco Chamber of Commerce for numerous courtesies extended, especially the automobile ride to Camp Arthur where some fifteen thousand soldiers are in training.

The convention proved a very successful one.

JNO. S. KERR, *Sec'y-Treas.*

RAFFIA REQUISITIONED

September 29th, 1917.

National Nurseryman:

The U. S. Army officials have taken every bale of raffia we had here. It is used for camouflage work—for the protection of our troops in France. The French authorities had formerly taken all shipments in transit for the same purpose. It looks as if there will be no raffia available for trade purposes for some time—though we are now negotiating for the lease or purchase of a steamer to bring the shipments awaiting steamer space.

Owing to there being no regular sailings from Holland, arrangements have been made whereby the fall Holland nursery stock shipments will come on special steamers sailing middle of October and November. It is likely that the same arrangements will be made for spring shipments unless there are regular sailings then.

Lilium giganteum shipments will be very late this season in arriving from Japan—owing to the lack of shipping space. All available steamers and space is being used for carrying war supplies. Formosums are already here.

Manetti stocks are practically unprocureable in England or France. There was only 30% of a crop in England and 15% in France—due to abnormally unfavorable spring weather conditions in Europe.

Pear and apple stocks in large sizes will be very scarce in France, small plantings were in general made, but a cold, wet spring and summer made most of them run to small sizes. Women and old men are now doing the office work in French nurseries. Shipping service from France will be equally as good as last season.

McHUTCHISON & Co.

PUBLICITY COMMITTEE

AMERICAN ASSOCIATION OF NURSERYMEN

F. L. Atkins, Chairman

September 20, 1917.

Gentlemen:—

You are doubtless familiar with the steps taken at the meeting of the American Association of Nurserymen in Philadelphia, in June, for the promotion of a Publicity Campaign. The one definite thing accomplished the unanimous endorsement of the report of the Publicity Committee, suggesting the publication of an educational booklet, entitled "Planning the Grounds for American Homes." A dummy was shown, indicating the contents of the booklet, covering the planting problems, both ornamental and fruit, that confront most prospective buyers. The aim would be, not the specific selling of any individual plant or tree, but to create a desire for more plantings on the part of those who have grounds available for planting.

The proposed book would be 32 pages and cover, with many one-color pictures and four pages in full color. The inside text would be the same in every case, and a large edition would be printed so as to reduce the unit cost. The books would be offered in lots as small as 1000 copies to nurserymen who desire to circulate them among their trade. The covers would be made separately for each or-

der, so that each nurseryman could have his own individual cover, with text matter appearing on the four pages, as desired.

The cost, including the special cover, will be approximately as follows:

1000 copies8c each	3000 copies6½c each
2000 copies7c each	4000 copies6c each
5000 to 10,000 copies5c each	

Before incurring any expense in the preparation of the copy or the manufacturing of the inside of the book, it is necessary that the committee know how many copies can be sold, and has authorized the undersigned to secure this information. We are enclosing herewith a self-addressed card for your convenience, asking that you report by return mail how many copies, if any, your firm can use, providing, of course, the proofs of the book that will be shown you later prove to be the kind of book useful in your business. This preliminary canvass, therefore, is simply to give the Committee an idea as to the quantity of books to be provided.

Please sign and return the enclosed card not later than October 1, so that the preliminary work may proceed without delay. It is desired to have the books ready for circulation during early winter and for next spring's business.

Yours very truly,

PUBLICITY COMMITTEE

Box 655, Harrisburg, Pa. O. P. BECKLEY, *Editor*.

Norristown, Pa., September 21, 1917.

Mr. F. L. Atkins,

Chairman Publicity Committee,

Rutherford, N. J.

Dear Sir:—

Replying to your circular letter of September 20th, signed by Mr. O. P. Beckley, Editor.

I beg to say that your scheme of a booklet such as you speak of seems to me entirely worthless, and this method of beginning a publicity campaign will never be worth even the time it takes to talk about it. I will not only not support it, but I wish to be recorded as opposing it. And I am surprised, yes exceedingly surprised, that the house that Mr. Beckley represents, is fathering and supporting, so small and the next door to nothing kind of a scheme.

In the first place, this very scheme of yours has been worn out by the lithographing houses years ago, and at the present time, booklets of this nature can be bought from any and all of them, and are being bought and distributed by the agents of the most of the Retail Nursery concerns.

And hasn't our distinguished friend Mr. McFarland declared in some of his speeches and in some of his full page advertisements against the littleness of "stock goods." However enough of this.

If the Publicity Committee of the A. A. N. wants to do something that is worth while, that is reaching the public, then let them join in the publicity work of the American Florists, such as was organized in their Convention in New York city.

I think it would be well for your Committee to confer with Mr. Therkildson and get all the facts and plans,

and you will find it will be to the greatest advantage to the A. A. N. if they will combine with the American Florists in this work.

Very respectfully yours,
(Signed) ADOLF MULLER.

Norristown, Pa., October 6, 1917.

To My Fellow Nurserymen:

Referring to the circular letter sent out by the Publicity Committee of the American Association of Nurserymen, from Box 655, Harrisburg, Penna., under date of September 20th, 1917, signed Publicity Committee, O. P. Beckley, Editor, a copy of which is reproduced herewith.

Permit me to ask, does it not seem to you, that the sending out of this "booklet" is nothing other, nor nothing better, than the selling of a "booklet" for the McFarland Publishing house.

This effort is so far removed from the purpose of the Publicity Campaign Committee's work, that I wish to appeal to every well thinking nurseryman and ask him to consider this proposition from every angle, and let no one have his mind befogged by this little "booklet" scheme, and say to himself that now, all is well, and we are on the way to a rousing and permanent Publicity Campaign. We are not. And I wish to shout this abroad, we are not.

And I hereby wish to ask the President of our organization to recommend to our Publicity Committee, that they adopt a method similar to that adopted by the American Florists' Society at their Convention in New York city.

If Mr. Therkildson, of Philadelphia, could be persuaded to assist our Committee in this work in outlining a plan such as the florists have adopted, then, and only then, will we be doing the right thing for everybody.

In order to do this, it will be necessary to have a guarantee fund of probably upwards of \$10,000.00 a year for Publicity alone, and I am willing to start this fund with a contribution of \$50.00 a year for five years.

Now then, if every nurseryman would offer a five year contribution to our committee, I am certain they would become so enthused, that before the next Convention, we will have a permanent National Publicity Campaign organized and working for the benefit of every last man engaged in the business of growing trees, shrubs and hardy plants, the landscape architect and all allied tradesmen.

Let every nurseryman express his opinion, either to our President, the Publicity Committee or through the columns of our Trade Journals.

Very respectfully,
ADOLF MULLER.

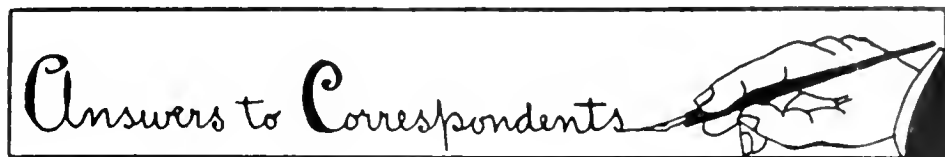
Fonthill, Ont., Sept. 24th, 1917.

The National Nurseryman,
Hathboro, Penna.

Dear Sirs:—

Enclosed please find check for \$1.50 for one year's subscription to your valuable paper.

Yours very truly,
WELLINGTON & DAVIDSON.



Q. In what way can a nurseryman be most useful these times in helping increase food, by growing vegetable plants or how?

S. A. VIRCHIN.

A. A nurseryman can be most useful at these times by using every bit of labor and land that is available in the production of food stuffs, preferably those that are not perishable, such as grains, potatoes, etc. Every little that is added to the country's food supply helps, even if the particular food stock you raise is not shipped out of the locality, it is just so much that will not be drawn from the general supply.

IMPORTS FROM FRANCE PERMITTED

Orleans, Paris, September 24, 1917.

The Editor of The National Nurseryman,
Flourtown, Pa., U. S. A.

Gentlemen:—

In order to avoid mistake, I have the duty to inform you that a French Presidential Decree dated August 24th and published in the "Journal Officiel" for August 25th has prohibited the exportation and re-exportation from France of trees, shrubs and all other nursery products. Happily, exception from this prohibition has been done already by the French Minister of Finance and another decree dated September 17th, 1917, declares that by a derogation to the dispositions of the decree of August 24th, 1917, all nursery stocks may be exported from France without special authorization, when the destination is the United Kingdom, its dominions and protectorates or British colonies, non invaded Belgium, Japan, Russia and the United States.

For neutral countries some exceptions will be authorized after demand.

I hope that this information will be of interest to you and your readers, and awaiting the favour to hear from you,

I remain, Gentlemen,
Yours very truly,
E. TURBAT,

67 route d'Olivet, Orleans
October 20, 1917.

Gentlemen:

I beg to advise you that Mr. Theodore J. Smith of W. & T. Smith Co., Geneva, N. Y., has recently resigned as a member of the Executive Committee of the American Association of Nurserymen, and that Mr. J. Howard Moon, of Morrisville, Pa., has been elected by the Executive Committee to fill the vacancy.

Yours truly,
CURTIS NYE SMITH, *Secretary A. A. O. N.*

Mr. Joseph H. Barnett, Jr., formerly City Forester of Gary, Indiana, is Captain of Infantry, Commanding 39th Company, 10th Battalion, 159th Depot Brigade, Camp Taylor, Ky.

The National Nurseryman

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THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

Editor ERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in Nursery Stocks of all kinds. It circulates throughout the United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements. Drafts on New York or postal orders, instead of checks, are requested by the Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be addressed, Editor, Flourtown, Pa., and should be mailed to arrive not later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., November 1917

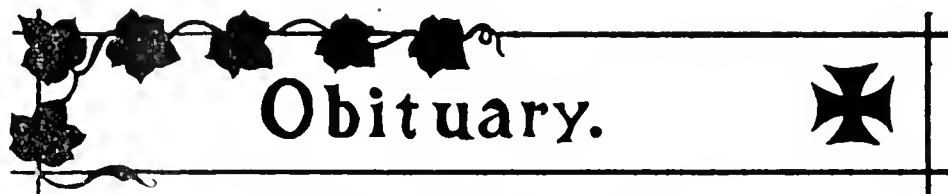
THE WAR AND AFTER. It is being gradually brought home to us who have been used to living peaceful lives, following our own bent, that our country is mobilizing for war. Those of us who live in country places, removed from populous centers and from great highways of commerce, perhaps have not realized the extent of the preparation. It is awe-inspiring to get a glimpse of the big coal roads moving their commodities to the seaboard, to get in the vicinity of the big camps, to see the magnificent manhood gathering from all parts of the country. To find that the big industries, the best brains, the skilled workmen, as well as the money, of which most of us are cognizant, is being mobilized for war, with scarcely a ripple, considering the size of the undertaking.

It only remains for each of us to dedicate our own minds individually to the same end, to consummate the most glorious proof for the reason for democracy. A hundred million people's sacrifice to prevent oppression.

Next to when the war will end, the most vital question is, what kind of business conditions will follow the cessation. There are pessimists who prophecy hard times and point to the period following the Civil War and find parallels in other great wars. They forget this is the age of steam, electricity, flying machines, education and printing, and let us believe more wisdom and team work for the common good, the present mobilization for prosperity.

No one knows better than the nurseryman and horticulturist of the undeveloped resources in this vast country. It will be a wise man who prepares for unprecedented demand and plans for increased production.

The period of adjustment is likely to be short and then look out.



Obituary.

JOHN HOWARD HALE

John Howard Hale, member of the Connecticut Public Utilities Commission, one of the foremost peach growers in the United States and former President of the American Pomological Society, died at his home in Glastonbury.



Mr. Hale, who was born in Glastonbury, November 25, 1853, was one of the first to ship peaches to Europe, where before the war the market had developed rapidly.

He was President of the American Association in 1879.

ROBERT L. PYLE.

Robert L. Pyle, of London Grove, Pa., died suddenly, from valvular heart failure on October 3rd, in his 76th year.

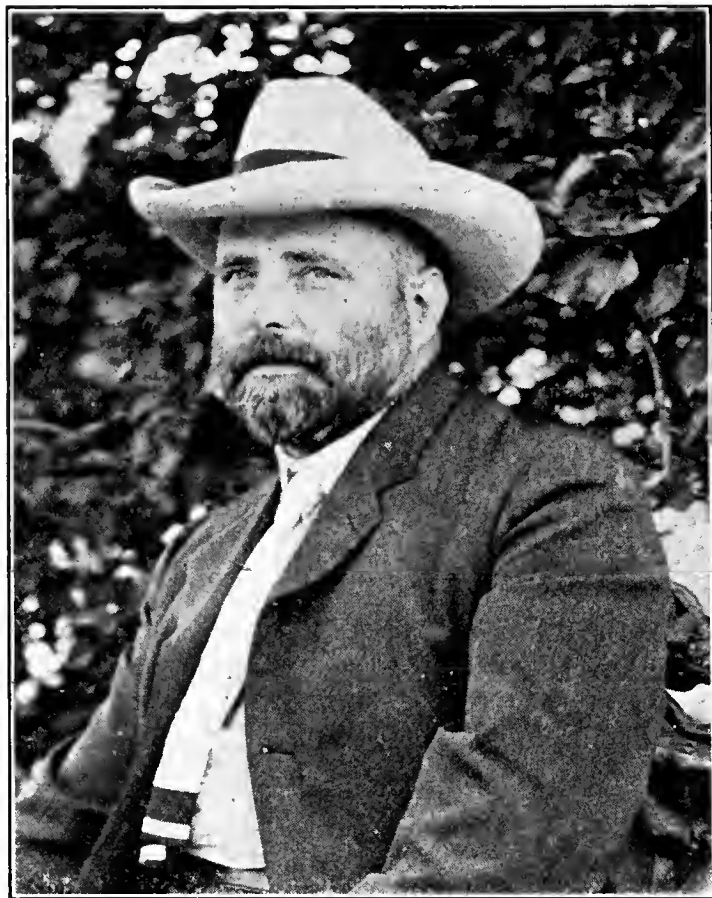
He was Treasurer of The Conard & Jones Company. For the past fifty years he has been an enterprising factor in the Mercantile business in Southeastern Pennsylvania, having there conducted a chain of stores. He has also been a stock holder in the firm of The Conard & Jones Company ever since its organization and incorporation, and in 1911 was elected its Treasurer. He was also President of the National Bank of West Grove. Five children survive him, including Robert Pyle, who is President of The Conard & Jones Company.

R. W. CLUCAS

We regret to announce the death of Mr. R. W. Clucas, proprietor of the Palisades Nurseries, Sparkhill, N. Y.

Mr. Clucas has been ill for nearly six months and died October 6th.

He was born in England in 1860 and came to this country in 1880, working with the Peter Henderson Com-



pany, New York, where he remained about ten years. He then became manager of the Seed Department of Pitcher and Mander, Short Hills, N. J., remaining with this firm about ten years. After this he engaged in business as a member of the firm of Clucas and Boddington Company, later founding the Palisades Nurseries in Sparkhill, N. Y., making a specialty of hardy herbaceous perennials.

Mr. Clucas leaves a wife, one son and four daughters.

LEWIS ROESCH AND J. R. MAYHEW EXCHANGE
OPINIONS

Fredonia, N. Y., October 3, 1917.

Mr. J. R. Mayhew,
Waxahachie, Texas.

My Dear Mr. Mayhew:—

I have just read your speech to the Southern Association of Nurserymen. I sincerely regret, however, that I cannot share your optimism.

I have been a nurseryman ever since my tenth year. I have been a member of the American Nurserymen's Association since 1885, most meetings of which I have attended and have heard you speak several times. I quite agree with you on most points you make in describing the present condition of this trade, but, I am sorry to say, I see no practical remedy. There are several things in the way of the success at which you aim and I cannot see how they are to be overcome. I will mention a few of them, trusting you can give some light and comfort.

First—There are two classes of nurserymen: those who sell only what they grow. They, of course, are on

the bull side of the market. Then, there are others who buy all they sell and are on the bear side. The bulls and bears clash and I do not see how you are going to harmonize them. "Well," you say, "by preaching the Golden Rule and Brotherhood." Well, that is good. I believe in them myself. But just the same, I know that you cannot get a corporal's guard to *act* according to those principles.

I have been obliged several times to offer grape vines at less than cost to grow. But I have never had the experience of a customer coming to me and saying, "Why, Roesch, you cannot afford to sell those vines at that price. I need some and shall pay you a fair price." No not once. But I have had customers tell me many times that while they knew I could not grow and sell them for the amount quoted, still they could not afford to pay me more than market rates. That they had the same grade of vines offered them by several others at the same rate and if I would shade the price a little I could have the order.

Second—To get together, we must have confidence in one another. Of course we do. Nobody will deny that. But for over thirty years, at every Association meeting, I have heard the announcements that a certain Protective Association will meet here, and another there. Secret cliques of which the members of one are excluded from the other, and more than half the members of the American Association are excluded from both. What for? Is it not the most natural thing in the world for the outsiders to conclude that they are purposely excluded to prevent them sharing in the benefits those inside hope to secure? That, certainly, does not inspire confidence. But saying so does not remove the doubt, and so long as there is a doubt there is no confidence.

Third—Then there is the farmer competition. Almost any farmer can grow nursery stock and too many do whenever prices get high enough. This extra stock together with the ensuing greater competition generally runs prices down so that they have to sell at cost or less. But the experience of one set does not deter the next in the least. There are several years between one slump and the next and one set does not remember the sorrows of the other, or may never have heard of them. I read in a little pamphlet published by the Department of Agriculture of New York dated September 1, 1916, that one hundred and fifteen nurserymen secured certificates of inspection in one place. Many of them had less than an acre of stock. Most of them were farmers and laborers growing a few trees in their garden.

Fourth—We have all heard it said over and over again that the actual cost of nursery stock could not be figured out. But of course that is a mistake. It can be done as accurately as any other problem by those who have the skill and ambition to do it. But the trouble is it is of but little value when it is done. The cost is one thing in one year and another in another year. One thing in one place and another in another place, according to weather, soil, and labor conditions, etc., etc. But suppose you knew exactly what every apple tree, for instance, costs you, including selling, packing, delivering and collecting, and that is, say eight cents apiece. Would you not have to sell it in competition with him whose trees cost but six or five? Or, again, would the grower whose trees cost ten

cents get any more for his just because he was not able to produce them as cheaply? Remember also that some of our brothers have interest to pay on their homes and farms and, perhaps, a large family to support, and while they would like to make a profit, in fact intend to, still they consider "half a loaf better than no bread at all" and are very likely to try to save the pieces from the wreck.

These are the main troubles, but not all by any means. The matter of collecting is in a bad way too. Time was when customers paid up pretty promptly, June 1st and December 1st. But now some try to let the account run indefinitely and act offended when the matter is urged. When a man has had his money invested in growing stock from one year to four years, and after delivery allows the account to run to next pay day without grumbling, I think he is then entitled to prompt and cheerful payment. The usual merchandise terms—thirty days, or two per cent. within ten days—do not fit this trade because we are too busy to collect during the packing season.

Then, the matter of state permits is getting worse every year. It would puzzle a Philadelphia lawyer to keep track of all the various state requirements, to say nothing of the expense. Some are funny, too, and pathetic at the same time. For instance, there are two states which number their state permit tags and want them used in numerical order. They will furnish them for a consideration and expect the unused ones to come back free. Another state requires that nurseries outside its boundaries shall first secure a permit for a consideration, thus clearly discriminating against out of state nurseries, an act which is, therefore, unconstitutional. The same law further says, "Dealers will be granted a certificate in this state only when they purchase from a certified nursery in the state." Thus again discriminating against outside nurseries, and is, therefore, unconstitutional, etc., etc.

I wish you could straighten these things out. To me they are hopeless. However, I would like very much to hear from you.

Yours very truly,
(Signed) LEWIS ROESCH.

October 19, 1917.

Mr. Lewis Roesch,

Fredonia, N. Y.

My Dear Mr. Roesch:—

Your very good letter of October 3rd. was duly received but because of its importance was laid aside until I could find time to give due consideration to your interesting questions. Before attempting to answer your letter, allow me to thank you for your very frank criticism and to say further that because others are doubtless and to say further that because of the importance of your discussion of these questions and because others are doubtless thinking along the same lines, I am taking the liberty of sending copy of your letter and my reply thereto to the trade journals. A fair and honest discussion of these questions will do good, and if the plan I have proposed and which is now scheduled for the first order of business at Chicago in June, 1918, will not admit of the most searching inquiry it is not worth what it has already cost.

I did not offer the pending resolutions as a panacea for all the nurserymen's ills, on the contrary I feel confident that so long as life lasts we shall have opportunity to incorporate in our dealings higher ideals and more aggressive business plans. I think we are all agreed that what is needed is a more intense business organization and closer cooperation among the membership, and this is what the writer of these resolutions had in mind. What I have proposed is, to be sure, only a start, and each year and each decade will beyond any sort of doubt open up the way for other changes. Your questions, however, cannot be answered in generalities, and I am, therefore, earnestly endeavoring to answer you in such a way that will be specific for I know when I read your letter that you are just as anxious to see a better condition brought about among the fraternity as am I.

(1) You are correct in your statement that there are two distinct elements among the nurserymen, but is there, after all, such a distinction as would render their interests antagonistic one to the other? In the truest sense, is not every nurseryman a "bull?" Has he, in other words, anything to gain by depressing the market, even though temporarily he is seemingly benefited? This year he is a buyer and next year, perhaps, he is a seller. It is never to the nurseryman's interests to "bear" the wholesale market, even though he be on the buying side. Now, I have never seen a nurseryman worthy the name who did not agree with the above statement, and yet, as you suggest, a large majority of us go into the competitive market determined to buy as cheap as possible. Who is to blame for these conditions? Every one of us. We do not know the worth (cost) of our products and, as a consequence, no one has a very high regard for values, hence the "battering ram." We issue each season a wholesale trade list, based not on cost but the rankest speculation, and not being sure of ourselves we fail utterly in convincing the buyer, whether wholesale or retail, that our prices are fair and equitable.

Now, my friend, it is proposed through the plan of gathering statistics to endeavor to determine the matter of costs, furthermore, to work out standards covering the entire field of operation. This is going to be a more difficult task than it is to determine costs in most manufacturing lines, but I am thoroughly convinced that it can be done and my opinion is reinforced by some mighty good authority. If the A. A. N. can determine the matter of costs and adopt certain standards, I have the confidence to believe the majority of the membership will live up to the spirit as well as the letter of the law, and as a result stock both wholesale and retail will settle down to a fair and stable basis. In other words, this will give us a basis, and whether absolutely correct or not its effect will be salutary. Will everyone live up to such an ideal? By no sort of means, in the beginning, but as is true everywhere else in life, if the principle we are striving for is right the few who will not abide by the majority rule should not deter us. Furthermore, those who do live up to the ideal will be most benefited.

(2) I find myself in hearty agreement with your suggestion that confidence or cooperation is after all the key to the whole situation. Without the sincerest cooperation of the membership all our plans will go awry for

without confidence there certainly can be no cooperation. Your reference to the organizations within the association is timely but is, I think, easily explained and when explained will be understood. You will remember that prior to the Detroit convention in 1915 the American Association of Nurserymen made no claim to a business organization, and while much good was accomplished for the nursery interests of the country through the Association's efforts, it was not until time mentioned that the Association determined to "go into business." As a result of this condition such organizations, to the lasting credit of a few of our progressive fellows, as the Protective Association, the Retail Protective Associations, etc., etc., came into existence. These organizations which, as you suggest, are organizations within the Association, have endeavored to do for the members of each what the larger organization has opportunity to do, and I am confident that whenever the American Association is ready to take over the work that will be the logical result. In fact I am reliably informed that the Protective Association expected to go out of business in favor of the parent association at its last annual meeting, but the organization of the American Association was not prepared to take over the work. Certainly such an organization as is now proposed can perform all of the functions heretofore delegated to others and this, I am sure, is as it should be and will meet the wishes of practically the entire membership. I think a careful reading of my address will prove this fact and that I am endeavoring to provide an organization for the members of the American Association of Nurserymen with special privileges to none.

(3) Farmer competition. Like the poor, this question has been with us always and, perhaps to some extent, will continue to be until we elect to quit buying stock of the farmer growers. I suggested as a slogan for the Association, "buy it from a member," and if we would do this it would, to be sure, eliminate this whole question. In other words, the farmer grower will go out of business any year we quit buying his stock. Through a wise plan of distribution this evil, I am sure, can be minimized, and the proposed plan of gathering statistics to be disseminated through a central agency will, beyond any sort of question, stimulate dealing among the membership rather than outsiders.

I think, perhaps, it would be unwise to attempt to discuss your fourth question until after the committee on standardization has endeavored to work out this problem. I shall, therefore, with a few words in general bring my letter to a close. There are hundreds of men all over the country, who, like you and I, are earnestly thinking about the problems of "ye nurserymen" and honestly and unselfishly endeavoring to better these conditions. Now, I have presumed to suggest that we build a competent organization along business lines, that we establish "general offices" in some centrally located city of the country, and to elect as secretary-manager a competent man to endeavor to work out not only the problems you suggest but every problem that has to do with the handling of trees and plants. The resolutions directing the Executive Committee to establish such an organization (see page 148 A. A. N. proceedings of Philadelphia meeting) are broad enough to accomplish all of this. There is no

problem, it seems to me, which this organization should not attempt to solve and which it will not, with the cooperation of the membership, be able to solve.

The one thing the membership should at this time endeavor to determine is, has the plan merit, and if after due consideration of every phase of the question it is determined we can do better in the future than we have in the past, then it will be in order at our next annual meeting of the Association to adopt the proposed amendments to the constitution (see page 161 proceedings of A. A. N. Philadelphia meeting) in connection with the resolutions referred to and to give the matter a fair and honest trial. I believe beyond any sort of question this will be done, and because I believe in the membership of the American Association of Nurserymen I say to you in all candor that I believe the adoption of the resolutions and the amendments to constitution as proposed will bring about a better day for the nurserymen of America.

With very best wishes and again thanking you for this good letter,

Yours very truly,

J. R. MAYHEW, *Vice President*
American Association of Nurserymen.

SUMMARY OF STATE LAWS

Governing Inspection, Certification and Transportation of Nursery Stock. Compiled by George G. Atwood.

*Published by courtesy of Charles S. Wilson,
Commissioner, Department of Farms and
Markets, State of New York.*

UNITED STATES.—All persons who intend to import trees or plants from any foreign country should first apply for, and receive, a permit from the Federal Horticultural Board, U. S. Department of Agriculture, Washington, D. C., under the Plant Quarantine Act of August 20, 1912.

A permit should be applied for in advance. This permit should preferably be taken out by the person who is to receive the goods at the final destination. A broker or commission merchant may take out a permit in his own name, if he imports for his own account, or he may act as agent for and take out the permit in the name of the actual purchaser. The importer must see that each package on arrival at the port of entry bears the proper certificate of foreign inspection. He must also see that each package is marked in accordance with Section 3 of the act. As a matter of convenience, this marking should contain also the additional information called for in Section 4, to avoid the trouble of re-marking before the goods can be delivered for interstate shipment. The certificate of inspection must be, and the marking preferably should be, on the goods before they leave the foreign port.

On the arrival of the stock, and before shipping or removing it from the port of entry, he must advise the Secretary of Agriculture and the proper state inspectors in accordance with Section 2 and Regulation 8. He must see that each container is marked in accordance with Section 4; that is, in addition to the information in the label of entry, each container must bear the name and address of the consignee at destination, where the stock is to be inspected by the state, territorial, or district official.

Any person receiving imported nursery stock and reshipping it, interstate, before it has been inspected by a duly authorized state, territorial, or district inspector or officer, is required, prior to making such reshipment, to notify the Secretary of Agriculture and the duly authorized inspector or other officer of the state, territory, or district, to which the nursery stock is to be reshipped, giving the number of cases, the bale numbers and marks, the quantity and kind of nursery stock, and the name and address of the consignee. If possible, the permit number under which the stock was imported, and the name and address of the foreign shipper should also be given.

Failure to meet the requirements of the law, as outlined above, penalties fixed in Section 10 of the act.

A pamphlet entitled, "Rules and Regulations under the Plant Quarantine Act: General, Including Nursery Stock," containing

the regulations governing the importation of nursery stock into the United States and the text of the Plant Quarantine Act of August 20, 1912, as amended March 4, 1913, may be obtained on application to the *United States Department of Agriculture, Federal Horticultural Board, Washington, D. C.*

NURSERY STOCK BY MAIL

Nursery stock, including buds and cuttings, can only be sent by mail when accompanied by a valid certificate of inspection. For further information apply to Joseph Stewart, Second Assistant Postmaster-General, Washington, D. C.

ALABAMA.—All nurseries in the state are inspected annually, or oftener, as may be desirable. Before shipping stock into the state, nurserymen must file signed and satisfactory copy of inspection certificate, secure official Alabama tags and take out nurserymen's license, which is issued upon payment of a fee of ten dollars (\$10.00). Agents are granted license only through nurserymen represented on payment of a fee of one dollar (\$1.00). Tags are furnished at cost price—first 100 for eighty cents (\$0.80); 200 for one dollar and twenty-five cents (\$1.25), postpaid; 1,000 for three dollars and forty-five cents (\$3.45), sent collect by express. The following insects, diseases, and pests are quarantined against: San Jose scale, new peach scale, woolly aphis, crown gall, black knot, peach yellows, peach and plum rosette, white fly, gipsy moth, brown tail moth, camphor thrips, cottony cushion scale, and citrus canker. Nematode galls have been placed on the proscribed list of diseases of nursery stock. It will be necessary for shippers to supply duplicate invoices of every shipment of 100 pecan trees, 250 apple trees, and 500 peach trees sent to a grower in Alabama. One of these invoices must be sent to the office of the State Horticulturist.

Alabama nurseries are required to secure a special permit for all citrus trees and a special permit tag must be attached (furnished at cost of tags) to each box, bundle, or bale, in addition to the usual Alabama nursery inspection tag, with the name and address of the consignor and consignee. Quarantine against all citrus for other states. Florida nurseries able to pass inspection by state authorities excepted. G. C. Starcher, State Horticulturist, Auburn, Ala.

ARIZONA.—Nursery stock shipped into the state must be prominently labeled with the name and the address of both the shipper and the consignee, and must be accompanied by a valid certificate of inspection or a copy of such certificate. Shipments into the state, consisting of or containing plants not grown in the locality from which shipment was made, must, in addition, specify where such plants were grown.

State quarantine orders now in effect and of interest to nurserymen prohibit; (No. 1) the importation of stock from sections infested by the alfalfa weevil; (No. 4) rooted grape vines from north of the north line of San Bernardino, Kern, and San Luis Obispo counties, California; (No. 8) the importation of citrus nursery stock from all other states and territories and of cape jessamine, privets, and rubber plants from North Carolina, South Carolina, Georgia, all states bordering on the Gulf of Mexico, and Yuba County, California; (No. 11) the importation of olive trees. Other quarantines relate to the Mexican orange maggot (quarantine made practically inoperative owing to establishment of Federal quarantine), cotton boll weevil, date palm scales, and citrus canker. None of these latter concern shipments of nursery stock into Arizona from outside sources.

All shipments of living plants into the state of Arizona are inspected by Arizona state inspectors and not delivered until a certificate of release is issued in each case to the common carrier and to the consignee. If trees or plants are infested or infected with insect pests or plant diseases of general occurrence in the section of the state where the shipment is received, treatment to eradicate, or the separation of the infested or diseased plants or trees, is in most cases permissible; otherwise all plants or trees of the kind found to be infested or diseased are held in quarantine and are shipped from the state or destroyed at the owner's option. Copies of quarantine orders furnished upon application. A. W. Morrill, State Entomologist, Phoenix, Arizona.

ARKANSAS.—Shipments of nursery stock into the state must be accompanied by permit tags issued by the Chief Inspector and sold at cost, together with a statement as to the amount and kind of stock, and a certificate of inspection. Out-state nurserymen must file copy of inspection certificate and obtain permit to ship, and agents' permits.

Foreign nursery stock must be inspected within the state.

Carriers are forbidden to move nursery stock in violation of these conditions. J. Lee Hewitt, Chief Inspector, Fayetteville, Arkansas.

CALIFORNIA.—Shipments of nursery stock into California are held by transportation companies until inspected by the state officials. All packages must be marked with the name and address of the shipper, name of the consignor, and the name of the country, state, or territory where the contents were grown. Peach,

apricot, and almond trees from districts where yellow and rosette are known to exist shall be refused entry and shall be destroyed or returned to the shipper. White pine trees, currants, and gooseberries from points east of North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, and Texas are refused entry into California for reason of white pine blister rust, and must be returned to shipper or destroyed. Notice of shipment of nursery stock to California should be sent to the following address, and also to the quarantine guardians at the point of destination.

All nurserymen importing plants or trees into California for propagation purposes must first secure a permit from the State Commissioner of Horticulture. A special number will be given to each nurseryman, which number must be attached to every shipment of stock consigned into the state. There must also be filed with the application for permit a certificate of inspection signed by a duly authorized inspector of the state from which shipments are made. Commission of Horticulture, Geo. P. Weldon, Chief Deputy, Forum Building, Sacramento, Cal.

COLORADO.—The State Entomologist has general supervision of the inspection of nurseries and orchards to prevent the introduction and spread of injurious insects and plant diseases. County horticultural inspectors in fruit-growing counties of the state are appointed by the county commissioners, after passing a satisfactory examination given by the State Entomologist, under whose direction they work. All nursery stock coming into the state must bear certificates of inspection and fumigation and on arrival in counties that have inspectors is turned over to them and released to consignee if it passes inspection. C. P. Gillette, State Entomologist, Fort Collins, Colo.

CONNECTICUT.—All nursery stock shipped into this state shall bear on each package a certificate that the contents of said package have been inspected by a state or government officer and that said contents appear free from all dangerous insects and disease. If nursery stock is brought into the state without such a certificate, the express, freight or other transportation company or person shall, before delivering shipment to consignee, notify the State Entomologist of the facts, giving name and address of consignee, origin of shipment, and approximate number of cars, boxes, or packages, and probable date of the delivery to the consignee. The State Entomologist may cause the inspection and, if infested, the treatment of the stock. No person, firm, or corporation shall unpack any woody field-grown nursery or florists' stock brought into this state from foreign countries except in the presence of an inspector, unless given permission to do so by said State Entomologist or one of his deputies. If such stock is found infested with any dangerous pests the State Entomologist may at his discretion order it treated. Dr. W. E. Britton, State Entomologist, New Haven, Conn.

DELAWARE.—Shipments of nursery stock into the state must bear a certificate of inspection and also a certificate stating that the stock has been properly fumigated. All nursery stock not accompanied by proper certificates may be held by the transportation companies until it can be inspected. Wesley Webb, Secretary, State Board of Agriculture, Dover, Del.

FLORIDA.—To each package of nursery stock shipped into the state must be attached a Florida permit certificate tag and a certificate issued by the state inspection official of the state where grown. These tags may be secured at cost from the undersigned by the deposit of a satisfactory certificate of inspection signed in ink by the proper inspection official of the state of issue. A duplicate invoice covering each shipment made into this state must be filed in the office of the Nursery Inspector at Gainesville, Fla., promptly after the shipment has gone forward. The shipment of citrus into Florida is prohibited. All host plants of San Jose scale must be fumigated before shipment. The entrance of all infested or diseased stock is prohibited. All plants capable of defoliation must be defoliated. Shipments must be completely and securely covered or wrapped. Nursery Inspection Circular No. 5 explains all of the details and will be sent free to those applying to F. M. O'Byrne, Nursery Inspector, State Plant Board, Gainesville, Fla.

GEORGIA.—Nurseries are inspected annually. A signed duplicate of inspection certificate, together with a statement by the nurserymen that all stock intended for Georgia will be fumigated in accordance with directions furnished them, must be filed in the office of the State Entomologist. Official tags of the Georgia State Board of Entomology will be furnished through the State Entomologist at the following prices: One hundred tags, 75 cents, postpaid; 200 tags, \$1.00, postpaid; 300 tags, \$1.25, postpaid; 500 tags, \$1.50, sent by express, collect; 1,000 tags, \$22.50, sent by express, collect. Each shipment of nursery stock into the state of Georgia must bear the official tag of the Georgia State Board of Entomology and also a duplicate certificate of inspection of the state from which the shipment is made. There is a strict quarantine against all citrus stock from Florida, Alabama, Mississippi, Louisiana, and Texas, except on special certi-

ficate from chief inspectors of those states. There is also a strict quarantine against white pines and all other five-leaf pines, as well as currants and gooseberries, which are known to be carriers of the disease known as white pine blister rust, from all infected areas. Prof. E. Lee Worsham, State Entomologist, Atlanta, Ga.

IDAHO.—No person, firm, or corporation shall import or sell nursery stock without first applying to the State Board of Horticultural Inspection and filing a bond in the sum of \$5,000 and securing annual license upon payment of \$10. Shipments into the state should bear a copy of an official certificate of fumigation emanating from the place where the stock was grown. All shipments into the state must bear a label showing the name of the shipper, the locality where grown and variety of nursery stock. All nursery stock, fruit trees, or horticultural plants sold or delivered by principal or agents shall be true to name and variety as represented. All nursery stock shipped into this state, whether bearing certificate of inspection or not, must be inspected again upon its arrival, the consignee paying for such inspection. Every nursery firm doing business in this state must pay annually \$1 additional for each agent who represents them.

The state of Idaho has established a quarantine against the states of New Hampshire, Vermont, Massachusetts, Connecticut, New York, and Pennsylvania, and forbids the shipment from these states of any five-leaved pines, currants, or gooseberries into the state of Idaho. Guy Graham, State Horticultural Inspector, Boise, Idaho.

ILLINOIS.—The new law, to be known as The Plant Inspection Act of 1917, which went into effect July 1, 1917, transfers inspection work from state entomologist jurisdiction to that of the Department of Agriculture.

Nurseries are inspected annually, beginning July 1st, and more frequently if circumstances require.

Greenhouses are inspected only on application.

In case part of a nursery is found to be infested with pests or is liable to become so infested before the close of the nursery season, the Department of Agriculture may prescribe such measures as it may deem necessary and withhold certificate of inspection until the nurseryman has signed an agreement to comply with the prescriptions and requirements made.

The Department of Agriculture is required to send to nurserymen of the state a list of official inspectors whose certificates are accepted as equivalent to its own, and a nurseryman receiving nursery stock under such certificates may substitute his certificate for them.

Nurserymen outside of Illinois wishing to solicit orders, through agents or otherwise, shall file a certified copy of their original state certificate and will then receive from the Department of Agriculture a permit in case such certificate is approved.

Nursery stock brought into the state must be marked so as to show the names of consignor and consignee, the general nature of the stock and *the locality where grown*, and be accompanied by official certificate of inspection. When nursery stock arrives in Illinois unaccompanied by an official certificate, the carrier, and the consignee also, must report the fact to the Department of Agriculture and hold such stock until it is inspected and the expenses of the inspection are paid, or until the stock is released.

Persons receiving nursery stock from foreign countries must notify the Department of Agriculture and hold said stock unopened until inspected or released.

The Department of Agriculture is authorized to establish quarantines.

P. A. Glenn, Chief Inspector, Urbana, Ill.

INDIANA.—All nurseries are inspected between June 1 and October 1 and at such other times as the head of the inspection department may consider advisable. Stock sent into or within the state must be plainly labeled with the name of the consignor and the consignee and must bear a certificate signed by a State or government official showing that the inclosed stock has been inspected and found free from injurious insects and plant diseases. All foreign-grown stock must be inspected upon arrival at its destination in Indiana. All dealers and agents engaged in selling or soliciting orders for nursery stock in the state of Indiana must take out a license, which is issued by the State Entomologist. All nursery firms or other persons whose place of business is outside the state of Indiana and who ship nursery stock into Indiana are required to file with the State Entomologist a copy of their valid certificate of inspection and procure a license, which is good for one year from the date of issue. The fee for license is \$1 in all cases. Quarantine order forbids the shipment of all five-leaf pines, currants, and gooseberries into the state of Indiana. Frank N. Wallace, State Entomologist, Indianapolis, Ind.

IOWA.—State nurseries are inspected at owner's request or if supposed to be infested with dangerous injurious insects or plant disease, and nurserymen are prohibited from selling or shipping without inspection. Shipments into the state must be accom-

panied by a certificate of apparent freedom from injurious insects or plant disease. A copy of inspection certificate must be filed with and approved by the State Entomologist. R. L. Webster, Acting State Entomologist, Ames, Iowa.

KANSAS.—Nurseries are inspected annually between June 15 and November 1. Certificates are valid until the first day of the following June. No nursery stock shall be brought into the state nor offered for sale within the state without having been properly inspected as shown by an accompanying certificate. State Entomological Commission, Topeka, Kan.; Prof. Geo. A. Dean, Entomologist, Manhattan, Kan.; Prof. S. J. Hunter, Entomologist, Lawrence, Kan.

KENTUCKY.—Nurseries are inspected annually. Every package of nursery stock shipped into the state must have a copy of a certificate of inspection attached and bear on the label a list of the contents. Duplicate certificates of inspection may be filed with the State Entomologist. Prof. H. Garman, State Entomologist, Lexington, Ky.

LOUISIANA.—Each package, parcel, box, bundle, or bale of nursery stock shipped or moved into Louisiana for delivery in this state from any state or country must be prominently labeled with a copy of a valid and unexpired certificate of inspection from the authorized nursery inspector of the state or country where the nursery stock was grown, and must also be prominently labeled with a copy of a valid and unexpired certificate from the entomologist of Louisiana. Written authorization and special certificate tags must be secured from the entomologist for each shipment of citrus nursery stock to be shipped into Louisiana for delivery in the state.

A permit must be obtained to ship nursery stock into Louisiana, and a copy of nursery inspection certificate from the authorized nursery inspector of the state or country in which the stock was grown must accompany the request for a permit to sell nursery stock in the state.

Orders for certificate tags to be used on shipments for delivery in Louisiana must be placed with the entomologist and money for tags must accompany the order. Up to 500 tags, delivered by insured parcel post, the price will be \$1.55 for the first 100 tags, and 40 cents for each additional hundred. Orders of over 500 tags will be shipped by express, collect, at \$1.50 for the first hundred and 35 cents for each additional hundred.

Tags will be numbered in numerical order and they must be used in this order. Each tag must be accounted for by the nurseryman. Address all communications to J. B. Garrett, Entomologist, Baton Rouge, La.

MAINE.—All nursery stock shipped into the state from any other state shall bear on each box or package a certificate that the contents have been investigated by an authorized inspecting officer. The State Horticulturist or his assistants may inspect at point of destination all stock coming into the state and if found to be infested with injurious insects or diseases, shall cause it to be destroyed or returned to the consignor.

No person, firm, or corporation, excepting those growing all the nursery stock they sell shall carry on business of selling or dealing in nursery stock or solicit purchases of nursery stock either as owner or agent without first obtaining a license to carry on such business. Form of license shall be prescribed by the State Horticulturist and must be renewed yearly. The license fee shall be \$5 a year for agents, dealers, salesmen or solicitors. Frank L. Dudley, State Horticulturist, Augusta, Me.

MARYLAND.—Nurseries are inspected at least once in six months. All nursery stock subject to attack of insect pests must be fumigated. Shipments into the state must be labeled with the name of the consignor and consignee and each package bear a certificate of inspection. Duplicate certificates should be filed with the State Entomologist. E. N. Cory, State Entomologist; C. E. Temple, State Pathologist, College Park, Md.

MASSACHUSETTS.—Nurseries in the state are inspected annually. Agents or other persons, excepting growers, who desire to sell nursery stock in the state shall make application to and receive from the State Nursery Inspector an agent's license, and shall file with the State Nursery Inspector names and addresses of all persons or nurseries from whom they purchase stock. It shall be unlawful for any person, firm or corporation to sell, deliver, or ship into the state any nursery stock unless such person, firm, or corporation holds a grower's certificate or an agent's license, and a copy of such certificate or license must accompany each car, box, or package delivered or shipped.

The State Nursery Inspector shall have power to inspect at its point of destination all nursery stock coming into the state, and should such stock be found to be infested with injurious insects or plant diseases he may cause it to be destroyed, treated or returned to the consignor at the consignor's expense. Dr. H. T. Fernald, State Nursery Inspector, Amherst, Mass.

MICHIGAN.—Nurseries are subject to inspection; infested trees must be destroyed, and all stock subject to the attack of

the San Jose scale, and which has been grown within a half mile of where this scale has been found within two years, must be fumigated with hydrocyanic acid gas. Shipments into the state must bear on every package, plainly labeled, the name of the consignor and consignee, statement of contents, and a certificate showing that the contents have been inspected by a state or government officer; and, if of species subject to the attack of San Jose scale, must be fumigated with hydrocyanic acid gas. Certificates of fumigation must also be attached, together with a copy of the certificate of inspection. This applies to individual orders when several are contained in the same shipment. All nurserymen, whether residents of Michigan or other states, who wish to grow or sell stock within the state must apply to the State Inspector of Nurseries on or before August 1 of each year for a license, for which the fee is \$5. A bond for \$1,000 must also be filed. Certificates of inspection must be filed with the State Inspector of Nurseries before any stock is shipped into the state.

A quarantine has been placed against the shipment into Michigan of five-leaf pines, and a provisional quarantine against the shipment of currants and gooseberries into the state. Prof. L. R. Taft, State Inspector of Nurseries and Orchards, East Lansing, Mich.

MINNESOTA.—Inspection, annual and compulsory. Inspection may be oftener if it seems desirable.

Shipments into the state must be accompanied by a certificate of inspection.

Carrying companies accepting stock not so tagged are responsible and liable to prosecution.

Dealers in other states sending stock into Minnesota for sale must file a copy of their certificates with the State Entomologist.

Quarantine orders have been issued against the importation into Minnesota of five-leaf pines, currants and gooseberries from the New England States, New York, New Jersey, Pennsylvania, Ohio, Wisconsin and Michigan. Prof. F. L. Washburn, State Entomologist, St. Anthony's Park, Minn.

MISSISSIPPI.—Nurseries are inspected at least once each year after August 1.

Nurseries outside of Mississippi desiring to ship plants into this state must file with the Entomologist, Agricultural College, Mississippi, a certificate of nursery inspection issued by the duly authorized state official in charge of nursery inspection.

This certificate must state that the nursery is properly equipped for fumigating plants with hydrocyanic acid gas. The proprietor or manager of the nursery must also file a statement that all apple, pear, peach, and plum stock will be fumigated immediately before being shipped into Mississippi.

Each package, box, bale or bundle of nursery stock shipped into this state must be accompanied by a copy of the certificate of inspection and all shipments containing apple, pear, peach, or plum stock must also be accompanied by a statement that the plants have been fumigated with hydrocyanic acid gas. All shipments of nursery stock must be plainly marked to show the names and addresses of both consignor and consignee, the number and kinds of plants, and the name of locality where grown.

Nurseries are required to furnish the Entomologist, Agricultural College, Mississippi, a duplicate invoice giving exact contents of each shipment of nursery stock made into this state. These duplicate invoices should be mailed at the same time that the shipments are made.

Because of the prevalence of citrus canker, the importation of all kinds of citrus plants into Mississippi has been prohibited. R. W. Harned, Entomologist, Agricultural College, Miss.

MISSOURI.—Nurseries are inspected annually. Each nursery outside of Missouri shipping stock into Missouri must apply at the office of the Chief Inspector for a permit, which will be issued upon filing the necessary papers and copy of their nursery inspection certificate. No fee is charged for the permit. All agents or salesmen must apply for an agent's permit. Every package of nursery stock shipped into the state must be clearly labeled with the name of the consignor, consignee, statement of contents, and a certificate showing that the stock therein contained has been inspected where grown by a duly authorized inspector and found to be apparently free from dangerously injurious insect pests and plant diseases. The transportation companies are not permitted to deliver nursery stock unless so labeled. Nurserymen outside of the state shipping nursery stock must attach to each and every shipment a special Missouri permit tag which must be obtained of the State Entomologist. Leonard Haseman, Entomologist and Chief Inspector, University of Missouri, Columbia, Mo.

MONTANA.—All stock brought into the state must be unpacked, inspected, and fumigated if necessary, at one of the designated quarantine stations; viz., Miles City, Edger, Joliet, Baker, Belfry, Red Lodge, Sidney, Glendive, Livingston, Lodge Grass, Park City, Columbus, Billings, Laurel, Helena, Dillon,

Butte, Bozeman, Harlowton, Great Falls, Lewiston, Glasgow, Havre, Mondak, Dooley, Bainville, Cut Bank, Anaconda, Missoula, Hamilton, Woodside, Victor, Como, Darby, Stevensville, Big Fork, Kalispell, Somers, Whitefish, Troy, and Plains. Nursery stock may be inspected and fumigated at other points of delivery upon payment of all costs. All shipments coming into Montana are subject to an inspection fee; carlots \$10, less than carlots in proportion with minimum fee of twenty-five cents for licensed nurseries, and 10 per cent. of the invoice price of the shipment with minimum fee of fifty cents for unlicensed nurseries. A quarantine order has been placed forbidding the bringing into the state of any five leaf pines, currants or gooseberries, from the states quarantined by the Federal Horticultural Board. Notice of shipment, including invoice of stock, must be sent five days prior to shipment to A. L. Strauz, State Horticulturist, Missoula, Montana.

NEBRASKA.—All nursery stock shipped into the state shall be labeled with the names of consignor and consignee and a certificate showing inspection since July 1, preceding. Prof. Lawrence Bruner, State Entomologist, or Prof. Myron H. Swenk, Assistant State Entomologist, University of Nebraska, Lincoln, Neb.

NEVADA.—Nursery stock shipped from other states shall bear on the outside of each car, bale, or package a label giving the names of the consignor and consignee, together with a copy of an inspection certificate of recent date. Such certificate of inspection must bear the signature of a qualified person in authority in the state in which such nursery stock was grown. No transportation company shall deliver any nursery stock lacking such official certificate of inspection. P. A. Lehenbauer, Horticulturist, University of Nevada, Reno, Nevada.

NEW HAMPSHIRE.—Nurseries are inspected at least once each year. Shipments into the state must be accompanied by a certificate of inspection or, in lieu thereof, an affidavit showing that the stock has been fumigated with hydrocyanic acid gas, using not less than $\frac{2}{10}$ of 1 grain of cyanide of potassium per cubic foot of space, in an air-tight compartment for not less than 40 minutes. A copy of the certificate of inspection or a copy of the affidavit must be attached to each car, box, or package shipped into the state. Hon. Andrew L. Felker, Commissioner of Agriculture, Concord, N. H.

NEW JERSEY.—The law requires the inspection of all nurseries at least once in each year. Shipments into the state must be accompanied by a certificate of inspection of current date, or copy thereof, attached to each car or parcel, together with a statement from the shipper that the stock therein is a part of the stock inspected, and stating whether such stock has been fumigated with hydrocyanic gas or not. It shall be the duty of all carriers to refuse for transportation within the state all stock not accompanied by a certificate of inspection. All stock coming into the state may be detained for examination, wherever found, by the State Entomologist or the State Plant Pathologist, and if found to be infested with any insects or plant diseases, injurious or liable to become so, will be destroyed.

"It shall be the duty of every nurseryman, or other person who imports plant material of any kind from without the state, and every transportation company or other carrier for hire that brings plant material from without the state for delivery to any person, persons, firm, or corporation within the state, to notify the Chief Inspector of such shipment prior to, or within twenty-four hours after, its arrival. Such notice shall state the kind, the quantity of plant material, the name and address of the shipper, the date of shipment, and, if from a foreign country, the name of the county or district in which the shipment originated, the port of entry and the approximate date of arrival at said port. If the Chief Inspector has any reason to suspect the presence of a dangerous pest he may order the examination of every package of such material, in transit or at the point of delivery, and shall not authorize its acceptance or delivery until he is satisfied that no dangerous pest is present.

Dr. T. J. Headlee, State Entomologist, New Brunswick, N. J. Dr. Mel. T. Cook, State Plant Pathologist, New Brunswick, N. J. Harry B. Weiss, Chief Inspector, New Brunswick, N. J.

NEW MEXICO.—No law relative to transportation of nursery stock. The Territorial Legislature of 1903 provided for county boards of horticultural commissioners, which were given authority to control orchard pests. Prof. Fabian Garcia, Horticulturist, Agricultural Experiment Station, State College, N. M.

NEW YORK.—All growing nursery stock in the state will be inspected annually or oftener if necessary; if found free from injurious insects or fungous disease there will be issued to the owner a certificate of inspection, which certificate will expire September 1, 1918.

Every car, box, bundle, or package must have attached an exact copy (including date of issue and date of expiration) of said certificate before shipment or delivery.

All nursery stock found growing within one-half mile of areas

infested with San Jose scale must be properly fumigated as required by the regulations of this department before shipment or delivery.

No nursery stock received from points within the state of New York shall be sold or delivered unless it bears a valid certificate of inspection on arrival.

Any nursery stock brought into the state must remain packed and unopened until permission is given by the Commissioner of Agriculture or his duly authorized representative. To facilitate rapid inspection, receivers of nursery stock should notify the department office at Albany or an authorized inspector of the receipt or expected receipt of consignments, giving the name and address of consignor and dates.

No nursery stock shall be shipped or delivered unless there is positive evidence that it has been inspected and certified by authority of Charles S. Wilson, Commissioner of Agriculture, Albany, N. Y.

NORTH CAROLINA.—Every shipment of nursery stock into this state must be accompanied by a valid copy of a certificate of inspection. Every person, firm, or corporation desiring to ship nursery stock into this state must file a copy of their certificate with the entomologist. It will be of advantage to the nurserymen if they attach a guarantee of fumigation to the shipment. A copy of regulations will be sent on application. Franklin Sherman, Jr., Entomologist, State Department of Agriculture, Raleigh, N. C.

NORTH DAKOTA.—The director of the Experiment Station is authorized to cause inspection and prescribe treatment of diseased nursery stock. Shipments into the state must bear a certificate of inspection. Every person who employs agents or salesmen or who solicits for the sale of nursery stock must obtain a license upon the payment of \$10 and upon filing a certificate of inspection and a \$500 bond. Said license will permit holder to do business in the state for one year. Director, North Dakota Experiment Station, Agricultural College, N. D.

OHIO.—Shipments of nursery stock entering the state must bear the name of the consignor and consignee and be accompanied by an official certificate of inspection or fumigation. Transportation companies are required to notify the State Board of Agriculture of all shipments of nursery stock entering the state. Agents are required to pay a license fee of \$1 and dealers a license fee of \$5, also to file sworn statements that the stock which they sell or deliver has been officially inspected and was received by them accompanied with a valid certificate of inspection or fumigation. Quarantine orders forbid the shipment into Ohio of five-leaf pines. N. E. Shaw, Secretary, State Board of Agriculture, Columbus, Ohio.

OKLAHOMA.—The following is a copy of surety bond to be used by nurserymen outside the state of Oklahoma who desire to dispose of nursery stock in the state of Oklahoma:

In accordance with Section 17, Senate Bill 342, Oklahoma Session Laws of 1914-15, this surety bond guarantees to the state of Oklahoma that the nursery represented will not dispose of nursery stock of an inferior grade, or nursery stock that is untrue to name, or nursery stock infested or infected with insects or diseases that are considered to be injurious by the Oklahoma State Board of Agriculture. Furthermore, the nursery represented in this bond guarantees by this bond to strictly comply with the law established by the state of Oklahoma and the rules and regulations promulgated in compliance therewith, by the Oklahoma State Board of Agriculture.

In the new regulations governing the nursery business in this state, the State Agricultural Board has adopted a provision whereby certificates for the agents of the nurseries will be certified to the employer, such certificate to terminate whenever the agent discontinues work for that employer, the certificate of the state to be held by the nurseryman during the agent's employment.

F. M. GAULT, President, State Board of Agriculture,
Oklahoma City, Okla.

OREGON.—The State Board of Horticulture has charge of inspection within the state. All nursery stock brought into the state must be inspected at station of delivery before delivery to consignee. If found infected or infested, nursery stock must be returned to consignor or destroyed. Peach pits, peach trees and scions, and other trees on peach roots grown in or coming from districts where peach yellows, little peach, or peach rosette are known to exist, are prohibited entry. Every carload and case containing nursery stock, trees, plants, etc., must have plainly marked thereon in a conspicuous manner and place the name and address of consignor; name and address of consignee; name of country, state, or territory where contents were grown and must show that it contains nursery stock seedlings, or seeds. The importation into Oregon of all trees of five-leaved pines and of species and genera of current and gooseberry plants and cuttings from all foreign countries and from all portions of the

United States east of the Mississippi river is prohibited. Address H. M. Williamson, Secretary, State Board of Horticulture, Portland, Oregon.

PENNSYLVANIA.—Nurseries must be inspected at least once a year, and no nurseryman, agent, dealer, or broker can legally sell or ship stock without a certificate of inspection. Nurserymen or other persons from other states desiring to sell nursery stock are required to secure certificates after filing a copy of their original certificate. Dealers in nursery stock are granted certificates upon application, and the filing of a statement that they will buy nursery stock only from nurserymen or growers holding valid certificates of inspection. All agents canvassing in the state for sale of nursery stock must secure and carry an agent's duplicate certificate. Transportation companies are required to reject all stock entering the state, unless certificates of inspection are attached. Shipment of chestnut nursery stock from Pennsylvania to outside points is prohibited. The state is also quarantined against the entry of any five-leaved pines from outside sources. Prof. J. G. Sanders, Economic Zoologist, Harrisburg, Pennsylvania.

RHODE ISLAND.—The Inspection Law provides that the State Board of Agriculture shall appoint a State Entomologist whose duties it shall be to inspect nurseries and orchards and to grant an annual certificate for sale of nursery stock. All nursery stock shipped into the state must bear on each package a certificate that the contents have been inspected by an authorized inspection officer. The State Entomologist is, furthermore, authorized to inspect any nursery stock which comes into the state, even when sent in under an official certificate, if he deems it advisable, and shall order its return to the consignor if any injurious insects or plant diseases are found therein.

An affidavit of fumigation is no longer accepted in lieu of official inspection.

Agents who have no nursery, and who wish to sell nursery stock within the state, must apply to the State Entomologist for an agent's license and must state where they propose to purchase their stock to be sold. A. E. Stene, State Entomologist, State House, Providence, R. I.

SOUTH CAROLINA.—To each package of nursery stock within or shipped into the state must be attached a permit tag of the South Carolina State Crop Pest Commission. These tags may be secured at cost from the South Carolina State Crop Pest Commission by the deposit of a satisfactory certificate of inspection and fumigation signed in ink by the proper inspection official of the state of issue. A duplicate invoice covering each shipment made into this state must be filed in the office of the South Carolina State Crop Pest Commission promptly after the shipment has gone forward. The shipment of citrus into South Carolina is prohibited except by special permit of this Commission. White pine prohibited; also other host plants of white pine blister rust. Fumigation of all host plants of San Jose scale is required. Entrances of all diseases and infested stock is prohibited. All shipments must be securely packed. A. F. Conradi, Entomologist, H. W. Barre, Pathologist, Clemson College, S. C.

SOUTH DAKOTA.—Nurserymen and dealers whose nursery stock is grown outside of South Dakota shall first secure a proper certificate from the State Entomologist of South Dakota before engaging in the sale of nursery stock in South Dakota. Agents of the above shall also be required to obtain a certificate whenever taking or delivering orders in South Dakota. A filing fee of \$1 shall be charged for issuing the certificate mentioned above.

Nurserymen and dealers whose stock is grown outside of South Dakota must file with the State Entomologist of South Dakota a copy of their official inspection certificate before engaging in the sale of nursery stock in South Dakota. Dealers will be granted a certificate in this state only when they purchase from a certified nursery in South Dakota such stock as they have not themselves grown.

Each package, box, bale, or carload lot of nursery stock shipped or otherwise delivered into South Dakota must bear a tag or poster on which shall appear an exact copy of the valid certificate of inspection of the consignor.

Quarantine orders have been issued forbidding the shipment of five-needled pines and all species and varieties of currants and gooseberries into the state from the New England States, New York, New Jersey, Pennsylvania, Ohio, Wisconsin, and Minnesota. Harry C. Severin, State Entomologist, Brookings, S. D.

TENNESSEE.—Nurseries are inspected annually, or oftener if necessary. Any person, firm, or corporation without the state, desiring to do business within the state, shall file with the State Entomologist and Plant Pathologist a copy of his certificate of inspection issued and signed by proper official of his state, as well as an agreement to fumigate properly all stock shipped into

the state. Every shipment must be accompanied by a copy of said certificate of inspection and a fumigation tag. Every individual sale or bill of trees shall bear a copy of certificate. Failure to comply with the requirements subjects stock to confiscation.

Following is the form of required agreement to fumigate:

We, the undersigned, agree to fumigate with hydrocyanic acid gas, according to the required strength, all nursery stock subject to attack from San Jose scale and other dangerous insect pests. We also agree to attach a fumigation tag to each and every shipment going into the state of Tennessee.

Prof. G. M. Bentley, State Entomologist and Plant Pathologist, Knoxville, Tenn.

TEXAS.—Nurseries and greenhouses are inspected annually. All shipments of nursery stock originating outside the state must not only bear shipping tags showing copy of certificate of inspection from the State Inspector of the state in which the shipment originates, but in addition thereto must have a tag showing copy of permit from Texas. Freight and express companies in this state are prohibited from receiving or delivering shipments which do not bear tags showing copy of Texas permit and they are exempt, by law, from damages arising from refusal to deliver such shipments.

No nursery stock shall be shipped into the state by any person or company without first filing with the State Department of Agriculture a certified copy of certificate of inspection from State Inspector of the state in which the shipment originates. A fee of \$5 is required for issuance of permit to ship into the state. Agents or dealers operating in Texas for nurserymen outside of the state, must procure proper credentials, as agents, from their nurseries, on a form furnished and approved by the Commissioner of Agriculture, and each agent or dealer must be prepared to present such credentials at all times.

Dealers are classed as nurserymen and are required to take out permit. Greenhouses and greenhouse plants are included for inspection by the Texas law and all State Inspectors should advise their nurserymen, florists, or owners of greenhouses that they must have a Texas certificate before they can make shipments into the state. Ed. L. Ayers, Chief Inspector, Houston, Texas.

UTAH.—No corporation, firm, person, or persons shall engage or continue in the business of selling within the state or of importing into the state, any fruit trees, shade trees, shrubs, vines, or plants known as nursery stock, without having first obtained a license to do business in this state as in this act provided.

Any corporation, firm, or person may obtain a license from the State Crop Pest Commission to engage in the business, as provided in the preceding section, upon payment of the fee of \$2.50 and by filing with the State Crop Pest Commission a bond, with good and sufficient sureties, in the sum of \$500, conditioned that the principal will comply with the provisions of this title, and will pay the cost of fumigating or disinfecting all nursery stock, materials or goods imported into the State or sold within the State by said principal, his or their agents, and the expense of destruction of any infected nursery stock. License granted under this act shall be for one year; provided, however, that such license may be revoked at any time for any violation of this act or the rules and regulations of the State Crop Pest Commission at the discretion of the commission.

It shall be unlawful for any corporation, firm, or person to sell, give away or distribute any imported trees, plants, shrubs, or vines within this state, until the same shall have been disinfected or treated. Importations of any sort of nursery stock shall be held in quarantine at owner's risk until disinfected, at the cost of the importer. Said disinfection or treatment shall be made to the satisfaction of the inspector in charge, when he shall release the same and issue certificate for its removal or distribution. John B. Walker, State Crop Pest Inspector, Salt Lake City, Utah.

VERMONT.—Nurseries are inspected annually. Nursery stock shipped into the state shall be accompanied by a certificate of inspection and the name and post-office address of the consignor and consignee. M. B. Cummings, State Nursery Inspector, Burlington, Vt.

VIRGINIA.—Before selling nursery stock, it is necessary to procure from the Auditor of Public Accounts, Richmond, Virginia, a certificate of registration for which the fee is \$20 for principals; duplicates for agents' use free. Send certified check or draft for \$20 drawn or indorsed payable to the Treasurer of Virginia. (Personal check will not be accepted.) Duplicate of certificate of nursery inspection must be filed with the State Entomologist, who will furnish tags at cost, and one tag must be attached to each package of stock to be sold in the state. W. J. Schoene, State Entomologist, Blacksburg, Va.

WASHINGTON.—No person shall sell or distribute nursery stock or solicit for sale without first obtaining a license to conduct business in the state. All licenses expire July 1. The

license fee for nurserymen and tree dealers is \$5, and for agents \$1. Nurserymen and tree dealers must execute a bond in the sum of \$1,000 to cover compliance with the state laws in that the nursery stock covered by said license be true to name and variety.

The state is divided into ten horticultural districts and an inspector-at-large is in charge of each district. All shippers of nursery stock into the state must give notice of their intention to ship by notifying the inspector-at-large into whose district the shipment is made, and sending a copy to M. L. Dean, Chief, Division of Horticulture, Olympia, Washington.

WEST VIRGINIA.—The Commissioner of Agriculture has power to provide quarantine regulations concerning the transportation and sale of nursery stock. No person or corporation either for himself or as agent for another shall offer for sale, sell, or deliver nursery stock unless he shall have first procured from the Commissioner of Agriculture a certificate of registration, the annual fee for which is \$20.

Quarantine orders have been issued prohibiting the shipment into West Virginia from any source whatsoever all five-leaf pines and all species and varieties of currants and gooseberries.

All nursery stock entering the state must be accompanied by a certificate of inspection and also by an official permit tag obtained from W. E. Rumsey, State Entomologist, Morgantown, W. Va.

WISCONSIN.—All persons, firms, or corporations shipping nursery stock into the state are required to file a duplicate certificate of inspection, and secure a state license. Each shipment must bear certificate tags, which shall be attached to each package, box, or carload lot. Transportation companies are forbidden to deliver nursery stock unless accompanied by valid certificate tags. All agents selling nursery stock within the state must be supplied with an agent's duplicate certificate, which shall bear the same number and date as that of the principal. Wilful misrepresentation of quality or variety of stock offered for sale shall constitute a punishable misdemeanor. No fees are charged.

QUARANTINE NOTICE

THE WHITE PINE BLISTER RUST

The existence of the dangerous imported disease of white pine trees known as the White Pine Blister Rust (*Peridermium strobi* Kleb.) in several of our eastern states has been confirmed by Federal authorities. In addition to the known infected areas, other localities are suspected of harboring the disease.

Believing that the white pine trees of Wisconsin would be endangered by the shipment of white pine trees into the state from outside sources, an absolute quarantine is hereby established, prohibiting the shipment into this state of any of the following species of pines or their horticultural varieties, viz., white pine (*Pinus strobus* L.), western white pine (*P. monticola* Dougl.), sugar pine (*P. lambertiana* Dougl.), stone or cembrian pine (*P. cembra* L.), and Bhotan or Himalayan pine (*P. excelsa*).

Hereafter and until further notice, by virtue of Chapter 413 Laws of 1915, shipment into Wisconsin from any source of the species of pine and their varieties hereinbefore named is prohibited.

(Signed June 1, 1916.)

E. D. BALL,
State Entomologist,
Madison, Wis.

WYOMING.—Licenses are issued on application for a period terminating on July 1 of the next succeeding inspection year (approximately two years). Applications should be accompanied by the license fee of \$25, and by a certified certificate of inspection from an authorized inspector in the state from which shipments are to be made. On receipt of these the Secretary of the State Board issues authorized shipping tags at cost. Transportation companies may not deliver unless such tag be attached to each shipment. A copy of the law may be secured from the Secretary of the State Board of Horticulture, Prof. Aven Nelson, Laramie, Wyoming.

CANADA.—Nursery stock shall be imported only through the ports and during the periods mentioned: Vancouver, B. C., from Oct. 1st to May 1st; Niagara Falls, Ont., from Oct. 1st to May 15; Winnipeg, Man., North Portal, Sask., and St. John, N. B., from March 15th to May 15th and from October 7th to December 7th; Windsor, Ont., and St. Johns, Que., from March 15th to May 15th, and from September 26th to December 7th; Truro, N. S., and Digby, N. S., for nursery stock destined to points in the province of Nova Scotia only; from March 15th to May 15th and October 7th to December 7th. The port through which the shipment is made shall be clearly stated on each package and notice of shipment must be made to the Dominion Entomologist at Ottawa.

Nursery stock shipped into Canada is fumigated at the port of entry. As greenhouse plants, herbaceous perennials and bed-

ding plants, bulbs and tubers are exempt from fumigation they must not be packed with nursery stock which is subject to fumigation. A declaration of the nature of the contents shall be clearly stated on each package of nursery stock shipped into Canada.

Importation into Canada of the following nursery stock is prohibited: Coniferous trees or the foliage thereof, decorative plants such as holly and laurel known as Christmas greens or greenery, from the states of Maine, Massachusetts, New Hampshire, Connecticut and Rhode Island. Five-leaf pines, chestnut and chinquapin and all species and varieties of currants and gooseberries.

Importation of plants or cuttings by mail is prohibited. Persons desiring to ship any kind of plants or plant products should obtain a copy of the regulations governing the importation of such plants into Canada and instructions should be strictly followed. Address Dr. C. Gordon Hewitt, Dominion Entomologist, Ottawa, Canada.

BOOK REVIEW

THE PEACHES OF NEW YORK

Great credit is due W. P. Hedrick and his associates at the New York Agricultural Experiment Station for the production of this splendid work. The Peaches of New York.

It not only gives a complete history of the peach but describes about 2000 varieties, giving their synonyms.

There are 86 full page, life size reproductions of varieties, and other plates of superb workmanship that should be nearly equal to living specimens for purposes of study.

The title of the work might just as truthfully be The Peaches of the United States, and students of the Peach the world over will always be in debt to the State of New York for furnishing funds for the production of such a work and the personel of the Department of Agriculture of that state who have so ably given the country a work of reference that is beyond the scope of the private individual.

"The Gospel of Beauty and Intelligence in Trees," by C. S. Harrison.

Nurserymen cannot help but feel a proprietary right in the works of C. S. Harrison, as he is one of them. Although an active minister of the Gospel for 45 years, the later years of his life have been devoted to revealing the riches and beauty of the plant world.

In this book, to use his own words, "He now presents this harvest of his later years in the hope that many will discover their own possibilities and so help make this a happier and more beautiful world."

Nurserymen should not miss the inspiration revealed in this book.

Price, cloth bound, \$1.00 Paper bound, 50 cents.

"Around the Year in the Garden," by Frederick Frye Rockwell, is published by The Macmillan Company, 66 Fifth Avenue, New York City.

This book gives in detail the work for each week in the year, suggestions relative to the selection of tools, seeds, fertilizers and plants; instructions regarding greenhouse, hot bed and outdoor planting, and also gives the time to spray, prune and fertilize. In short, the book covers in a very comprehensive way, each branch of gar-

den work in its proper season. It is well illustrated and contains many tables which would be of great value to the layman, for whom the book is really intended.

Price \$1.75.

"The Strawberry in North America," by S. W. Fletcher, Professor of Horticulture at the Pennsylvania State College.

This book treats mainly of the origin and history of the North American Strawberry, beginning with the Wild Strawberry in colonial times and following it down through various experiments and improvements to the named varieties of the present day.

While it is a complete history, it is also extremely practical, giving contrasting methods of culture, shipping, packing and marketing. There is no question but the author knew his subject.

The MacMillan Company, 66 Fifth Avenue, New York City, are the publishers, price \$1.50.

WHITING NURSERY CO. PROTESTS

Boston, October 8, 1917.

The National Nurseryman,
Flourtown, Pa.

Gentlemen:—

You may have seen in the columns of The Rural New-Yorker, Publisher's Desk, under date of September 8, 1917, an article reflecting upon the Whiting Nursery Company.

We are instructed by our Mr. Whiting to inform the trade generally, and others who may be interested, that the article mentioned is false and absurd.

As he has been on the road constantly for the past forty-two years, it would be no credit to his intelligence to hand out such stuff as that. The article in question is as follows, and is fortified by editorial comment:

"Mr. Whiting of the Whiting Nursery Co. is personally canvassing Erie County selling transparent pitless plums, selling them at 90c each. He called here at our farm. I asked him what firm he was selling for and when he told me I told him a few things about his past record, and he asked me where I got my information. When I told him the R. N. Y. he said he could see I would not order any and he would not take up my time. But he has certainly found a lot of suckers here, selling several hundred dollars worth." —J. P., Pennsylvania.

Mr. Whiting carries pits of Japanese Plums and shows them to each customer, that he may see the difference in size between them and the pits of European Plums that are usually grown. He sometimes speaks of the Shiro, and that only, as transparent, a fact that is mentioned in some nursery catalogues.

Our price is 83 1-3 cents each to all customers, not 90 cents, and we supply selected stock to correspond with the price.

Right-thinking people acquainted with the facts believe the Rural New-Yorker's campaign against our Company has reached the point of persecution.

Yours very truly,

WHITING NURSERY COMPANY,

Per L. S. SMALL, Office Manager.

NITRATE OF SODA

The government of the United States has appropriated \$10,000,000 to secure nitrate of soda and supply it to farmers at cost.

It is proposed to co-ordinate all the government purchases of Chilean nitrates and it is realized that nitrates are as important to the production of food stuffs as to explosives.

There have been available no thoroughly satisfactory data as to the yields of crops due solely to the application of nitrate of soda, and therefore, as to the price at which farmers can afford to use it. Realizing this fact, the Secretary of Agriculture directed the Bureau of Plant Industry last spring to make 100 experiments. These experiments are being made with corn in five Southern states—Virginia, North Carolina, South Carolina, Georgia and Alabama—in ten counties in each state, and on two farms in each county. It is hoped that the results of the investigation will be available within the next six weeks. When information is secured it will promptly be given publicity.

Abilene, Kansas, Sept. 28th, 1917.

The National Nurseryman,
Hatboro, Pa.
Gentlemen:—

Enclosed find check for \$1.50, enter our subscription for one year. We feel that your journal is essential in our business.

Crop conditions in this part of the country were excellent and business is good.

Yours truly,
W. T. GOUGH & SON.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC.

Required by the ACT OF CONGRESS OF AUGUST 24th, 1912

Of the NATIONAL NURSERYMAN, published monthly at Hatboro, Pa., for November 1, 1917.
State of Pennsylvania.
County of Philadelphia.

Before me, a Notary Public, in and for the State and the county aforesaid, personally appeared Thomas B. Meehan, who, having been duly sworn according to law, deposes and says that he is the Business Manager of the NATIONAL NURSERYMAN, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation) etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24th, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse side of this form: to wit:

1. That the names and addresses of the publisher, editor, managing editor and business managers are:

Publisher—THE NATIONAL NURSERYMAN PUBLISHING CO. INC., Hatboro, Pa.

Editor—ERNEST HEMMING, Flourtown, Pa.

Managing Editor—None.

Business Manager—THOMAS B. MEEHAN, Dresher, Pa.

2. That the owners are:

Mrs. Ellen B. Yates, Rochester, N. Y.

James McHutchison, Jersey City, N. J.

Thomas B. Meehan, Dresher, Penna.

Albert F. Meehan, Dresher, Penna.

Penrose Robinson, Hatboro, Penna.

3. That the known bondholders, mortgagees and other security holders owning or holding 1 per cent. or more of total amount of bonds, mortgages, or other securities are: NONE.

THOMAS B. MEEHAN, Business Manager.

Sworn to and subscribed before me this 9th day of October, 1917.

Elmer Miller, Notary Public.

(My commission expires March 11, 1921.)

When writing to Advertisers please mention the National Nurseryman.

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OLD ESTABLISHED NURSERY FOR SALE

As I want to retire from business, I will sell besides the land, all nursery stock and implements. This nursery is located in the Northwest in one of the best business localities of this country. Address:

Z. W. S., Care "The National Nurseryman."

WANTED

WANTED: A strictly competent, experienced man to take charge of our nursery storage and packing room. He must be able to handle number of workmen in these departments and get best results. Write us giving experience, reference and salary expected.

(Signed)

GURNEY SEED & NURSERY CO.,
Yankton, So. Dak.

WANT TWO NURSERYMEN -- One outside man and one for office

VAUGHAN'S SEED STORE
Chicago

WANTED

A working foreman in nursery, one that can manage a crew of men in either the billing and packing dept., or in propagating dept. or both. In writing give references of prior experience, and salary expected.

THE MUNSON NURSERIES, - Denison, Texas.

THE IMPROVED
Feigly Nursery Tree Digger

First class service with the minimum cost

Every Nurseryman should own one

Can make prompt shipment at all times

Manufactured by AL. K. FEIGLY,
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Berry Plant Nursery in America

The leading varieties supplied in large quantities, including Fall Bearers. Currants, Grapes, Gooseberry, Blackberry, Raspberry and Strawberry. Root Cuttings, Slips, Tips and Transplants a specialty.

You never delivered finer stock nor received quicker service than you get from yours truly.

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Collect your slow accounts without offense, at slight expense—with my twelve wholesome, human letters (copyrighted and attested) \$1.00; refunded to dissatisfied.

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New Jersey

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March, 1902.

October, 1903.

August, 1905.

Address, THE NATIONAL NURSERYMAN,
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Nurserymen

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Specialties: Kalmias, Andromedas, Ilex opaca, crenata, glabra, Azalea viscosa, nudiflora, calendulacea and arborescens, Cornus florida rubra, Vaccinium corymbosum and macrocarpa, etc., etc.

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Native Trees, Shrubs and Vines

At Special Prices
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 Apple, Std. and Dwf. Pear, Cherry, Plum,
 Peach, Quince, Apricot, Small Fruits, Grape
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Peonies *The Best 15 Acres*

Quick Delivery American Grown
 Delivery Now or Spring
 Send List of Wants and Ask for List

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We have a big lot of some varieties of Flowering Shrubs, well rooted, bunchy, that will be sold at low prices in quantities. If at all interested in shrubs in quantities, please write us for list, stating approximate quantity you can use.

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The universal verdlet of all who sample this new berry fruit is: "The most delicious berry I ever sampled." Has the market to itself on account of its extreme earliness and exquisite flavor. Fruit large, a deep vermilion red, very showy, great shipper, enormously productive. Not a dew-berry, blackberry or raspberry, but a distinct new berry fruit. Three plants for one dollar to any P. O. in the U. S.

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Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myrobalan Plum and Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a large assortment. My Catalogue contains complete list with Prices. Send for a copy.

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A Magazine of Trade News and Cultural Information for the NURSEYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

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 Under this title we publish the most reliable, progressive and up-to-date trade paper in the country, with departments covering the Nursery, Florist, Seed Trade and Allied Industries. With a paid up subscription and distribution list of 10,000 copies, nearly every copy of which is to men in business for themselves the worth of our columns will be readily appreciated. The editor of our Nursery Department is and has been for years, JOSEPH MEEHAN, of Philadelphia.
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ESTABLISHED 1893

THE NATIONAL NURSEYMAN INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock. Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

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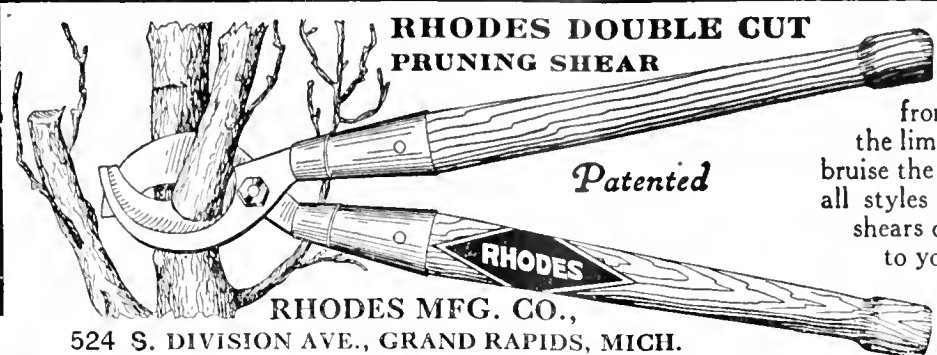
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For Fall 1917

WILL BE PLEASED TO
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We offer a Complete
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**RHODES DOUBLE CUT
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RHODES MFG. CO.,
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THE only pruner made that cuts from both sides of the limb and does not bruise the bark. Made in all styles and sizes. All shears delivered free to your door. Write for circular and prices.



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Two year root cuttings. Just the thing for fall shipments, as they will mature early. Our stock includes about 100,000 each of Mersereau and Snyder.

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PRICED TO SELL

California Privet—all sizes—BEST stock in South.
Silver Maple—large or small sizes in car lots.
Spirea Van Hout, 5-6 feet, twice transplanted.
Hydrangea P. G.—2-3 feet, 5 branches and up.
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Lombardy Poplar—low branched.
White Flowering Dogwood—4 feet.
and other seasonable stock.

Write us

H. F. Hillenmeyer & Sons

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"In the Heart of Kentucky's famous Blue Grass Region."

400 ROSES

Fall Price-list
New and old sorts

Get in on our early summer propagation,
—place order for spring lining out stock.

THE LEEDLE FLORAL COMPANY®
SPRINGFIELD-OHIO.

TREE SEED

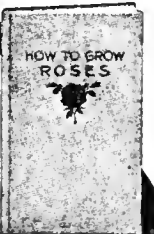
Large assortment of Tree, Shrub and Fruit
Seeds for ornamental and forestry purposes.
Send for catalogue. **CONYERS B. FLEU, Jr.**
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Your customers will want a copy of this Rose Book.

You can sell it to them and make 100% profit on every copy you sell.

We sell it to you for 50c a copy.

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Now is just the time when folks' minds are beginning to turn gardenward again.

Now is just the time, then, when the Rose Book sells best—when folks have the most time and greatest inclination to read such things.

Send for a trial lot of these sure-fire money-makers today, and let them make money for you.

We'll gladly send you further terms and a copy of the book if you so desire.

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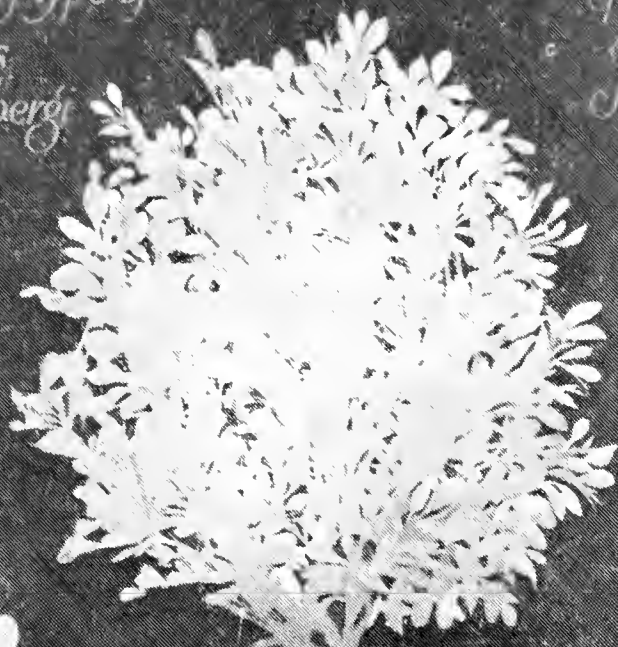
EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine PROGRESSIVE Everbearing plants, guaranteed to be TRUE TO NAME and handled so as to reach you in best of growing condition. Write for prices. We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

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Box-Barberry
New dwarf type of
Berberis Thunbergi

New Ideal Hedge Plant



TO BE INTRODUCED TO THE TRADE IN
FALL 1917
TO THE GENERAL PUBLIC
FALL 1918

ORIGINATED AND OFFERED ONLY BY
THE ELM CITY NURSERY CO.
WOODMONT NURSERIES, INC.
NEW HAVEN, CONN.



*Natural Size of
Box-Barberry Foliage*

Inquire for Prices

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Box-Barberry

Dwarf type of

Berberis Thunbergi

New Edge and Dwarf Hedge Plants

ORIGINATED at our Nursery sixteen years ago among a batch of Japan Barberry seedlings. It attracted attention in the seedling bed and has been under careful watching since. The original plant is now about 2½ feet wide, and globe-like in shape, its natural form.

It is pronounced a most valuable find by all who have seen either the original plant or the stock we have propagated from it, including experienced nurserymen, landscape architects and gardeners, experiment station men and amateurs.

The public will take to it immediately. It's just what is wanted. As a formal-garden edge plant it is ideal;—this means thousands of it for many a single order. Equally desirable as a low and medium hedge plant, assuring a heavy demand. Trims into perfect formal specimens.

Propagates readily from either hard or soft wood cuttings. Will not come true from seed.

Offered to the Trade Fall 1917—No Restrictions

Offered to the general public and will be freely advertised in Fall 1918 and Spring 1919. Get up a stock and be ready for the certain heavy demand.

The Elm City Nursery Co.

Woodmont Nurseries, Inc.

NEW HAVEN - - - CONN.

New Nurseries at Woodmont, Conn.

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A good paying business in every respect. Also a large stock of heavy apples to offer the wholesale trade. If interested, write us.

PLAINVIEW NURSERY, - PLAINVIEW, TEXAS

Norway Maples, Oriental Planes

At Reduced Prices

Shrewsbury Nurseries, GEO. A. STEELE
EATONTOWN, N. J. Proprietor

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reading this advertisement.

Yours in the

NATIONAL NURSERYMAN

Would be Read by Thousands

Address HATBORO, PA. office for Rates

WANTED Some nursery firm believing that instead of importing his nursery stock, such as Roses, Azaleas, etc., etc., these can be grown in America just as good if only the right man takes charge of it.

ADVERTISER a Holland wholesale grower of nursery-stock having visited American nurseries often, wishes to communicate with some progressive firm who is willing to start or increase the growing of these "Holland" items and where he can find a managing part with view of partnership.

It will be wise policy to be ready when possible America prohibit import of nursery stock.

Address: MANAGER care "The National Nurseryman," Hatboro, Pa.

Hardy Ferns 11 NAMED VARIETIES

Illustrated descriptive list mailed free.

Ludvig Mosbaek, Ferndale, Askov, Minn.

We have the following list of shade and ornamental trees, transplanted unless otherwise noted. Send in your list of wants for special prices.

300 Ash	.....8	-10	250 Honey Locust	4	-5
3,000 "	.....6	-8	200 "	"	5-6
3,000 "	.....5	-6	100 "	"	1 1/4-1 1/2
7,000 Boxelder	.....4	-5	100 "	"	1 1/2-2
9,000 "	.....5	-6	SOFT MAPLE		
10,000 "	.....6	-8	20,000 Sdg.	.....3	-4
200 "	.....8	-10	30,000 " & Trnspt.	4	-5
4000 Catalpa Speciosa	..4-5		3,000	.....5	-6
3,000 "	.....5-6		2,000	.....6	-8
3,000 "	.....6-8		400	.....1 1/4-1 1/2	
400 "	.....1 1/4-1 1/2		300	.....1 1/2-2	
5,000 Elm	.....5	-6	300	.....2	-2 1/2
3,000 "	.....6	-8	200	.....2 1/2-3	
1,000 "	.....8	-10	MULBERRY		
3,500 "	.....1 1/4-1 1/2		4,000	.....12-17 Sdg.	
3,000 "	.....1 1/2-2		700	.....3-4	"
700 "	.....2	-2 1/2	WALNUT—BLACK		
4,000 Hackberry	3	-4 ft.	2,000	.....4-5	
3,000 "	4	-5	8,000	.....5-6	
4,000 "	5	-6	2,000	.....6-8	
1,000 "	6	-8	100	.....8-10	
500 "	8	-10	SEEDS		
375 "	1 1/4-1 1/2		Russian Olive		
350 "	1 1/2-2		Ash Seed		
350 "	2	-2 1/2			
350 "	2 1/2-3				
100 "	3-4 in. Cal.				

Gurney Seed & Nursery Co.

YANKTON, SOUTH DAKOTA

A Pruning Book That Will Build Business for You



Here is a book that will help you by helping your customers.

It is a practical guide to right pruning and growing. It will tell every purchaser of your products how, when and where to prune for the most vigorous and healthy growth.

Knowing the kind of shears to get is equally as important as knowing how to use them. This book will give your customers some helpful information about shears too.

We'll Send You a Copy Free

We have a plan of co-operative selling and advertising of which "The Little Pruning Book" is an important part. It's a plan that will help you sell Nursery Stock and help us sell Pexto Pruning Shears.

You must see the book before you can appreciate the plan. It sells in book-stores for 50 cts., and believe us "It's worth sending for." Furthermore, sending for it does not obligate you in the slightest. It just gives us an opportunity to tell you about our business building plan.

Send for your free copy today.

The Peck, Stow & Wilcox Co.

2189 W. Third Street

Cleveland, Ohio



PRUNING SHEARS

A Handsome New Peony

Leon Renault's world-famed nurseries at Orleans, France, have originated a new herbaceous Peony which is named

The Lord Kitchener

Beautiful flowers of brilliant cherry-red produced in great abundance on strong, free blooming plants. One of our customers who received a few roots last spring says he got some flowers during the summer and that the color was up to his expectations. He expressed his confidence in The Lord Kitchener by sending us a larger order.

We are the sole American agents for Leon Renaults' nursery, and your orders should be sent to our New York branch.

F. J. Grootendorst & Sons
10 Broadway Room 1101
NEW YORK, N. Y.

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We grow all Outdoor NURSERY STOCK including FRUIT, ORNAMENTAL, FOREST, ROSE STOCKS, Etc.

We have a large stock of ROSE TREES, also NEW and RARE TREES and SHRUBS, HARDY HERBACEOUS.

Our wholesale catalogue, most complete, exceedingly interesting, is at the disposition of the Nursery Trade.

If you have not received it, write to us

E. TURBAT & CO.
NURSEYMEN

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FRANCE

BALTIMORE, MD.



APPLE --- PEACH --- PEAR

Fine stock of 2 year California Privet, Asparagus, Oriental Planes, Norway and Sugar Maples; Pin, Willow, and Red Oaks, Lombardy Poplars, etc.

Sizes, prices and samples upon request.

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Palms and General Decorative Plants, **INSPECT**
Conifers, Shade and Ornamental Trees **INVITED**

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in heavy quantities

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NEWARK, NEW YORK,

Is our sole agent for the United States and Canada

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The Nurseries - Hounslow,
Est. 1820 England

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Headquarters for
Small Fruit Plants
1200 Acres "At it 25 Years"

Strawberries	Currants	Rhubarb
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Blackberries	Grape Vines	Horseradish
Dewberries	Privet	Hardwood Cuttings
Berberry	Spirea	Butterfly Bush

100,000 transplanted Raspberry, Blackberry and Dewberry plants for retail trade. See wholesale list before placing your order.

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NEW CARLISLE, OHIO

Portland Wholesale Nursery Co.

122 1/2 Grand Avenue, Portland, Oregon

General Nursery Stock and Nursery Supplies

APPLE, one year, large assortment.
PEAR, one and two year, mostly Bartlett.
CHERRY, one and two year, general assortment.
PRUNE, one year, mostly Italian and French.
GOOSEBERRY, one and two year, Oregon Champion.
SHADE TREES in assortment.
ROSES, field grown, large assortment.

Our Trade List is now ready; a postal card will bring it.

A Large Stock of Apple, Pear, Cherry and Peach Grape Vines, Blackberry and Raspberry Plants

And a general line of ORNAMENTAL TREES and SHRUBS. All stock clean and thrifty, the best that can be grown.

T. B. WEST, Perry, Ohio.

W. T. HOOD & CO. OLD DOMINION NURSERIES

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VIRGINIA

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We will have a heavy stock of Peach Trees and Norway Spruces on which we can quote attractive prices.

We expect to be in position to offer Natural Peach Seed, crop of 1917. Send us your list for quotations.

W. FROMOW & SONS

Azalea mollis, Rustica & Ghent in all the leading varieties, grown from layers not grafted.

Manetti Stocks clean and well rooted for grafting or open ground.

Standard, Climbing, Weeping and Dwarf Roses in great variety Rhododendrons, the cream of the Hardy American varieties.

Andromeda floribunda, japonica, and speciosa, bushy budded plants.

Kalmia latifolia.

Green and River's Purple Beech in all sizes up to 12 feet.

Prices and full particulars on application.

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Wishing to do business with Europe should send for the

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This is The British Trade Paper being read weekly by all Horticultural traders. It is also taken by over 1000 of the best Continental houses. Annual subscriptions to cover cost of postage, \$1.00. Money orders payable at Lowdham, Notts. As the H. A. is a purely trade medium applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trades. Address

Editors of the "H. A." LOWDHAM, NOTTS, ENGLAND

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Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.

The Bay State Nurseries

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This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us est.

Fall 1917

Spring 1918

Est. 1884

400 Acres

Capital \$60,000.00

WE have our usual line of Cherry, Sweet and Sour; Apple, Peach, Pear, Plum, Quince; also Shrubs and Ornamentals.

ALL UPLAND GROWN

We will be glad to send you our wholesale price list.

MALONEY BROS. & WELLS CO.

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Upland grown trees transplant best.

NURSERY BANDS

Manufacturers of

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SPECIAL OFFER.—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

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The National Nurseryman, by special arrangement with the publishers, offers this work on easy terms. Six large quarto volumes. More than 3,600 pages. 24 full page exquisite color plates. 96 beautiful full page sepia halftones. More than 4,000 text engravings. 500 Collaborators. Approximately 4,000 genera, 15,000 species and 40,000 plant names.

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Sixth and Final Volume Now Completed

Price for this Valuable Work \$36.00

The National Nurseryman
Hatboro, - Penna.

2,000,000

Red and Black

Raspberry Plants

*For Fall and Spring
1917-18*

Write us for special prices on stock for winter storage
Headquarters for

CUTHBERT, KING, MILLER, ST. REGIS, CUMBERLAND, GREGG, CONRATH, KANSAS, PLUM FARMER.

Millions of Strawberry Plants for Spring Delivery

Get in touch with us

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Plain, Painted, Wired with Tinned or Copper Wire and
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*Prices as low as First-Class Work and Unequalled Promptness in
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P. O. Address, DERRY VILLAGE, N. H.
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When the Goods Are Offered, Then Is the Time to Buy



This big block contains enough one-year Apple trees to plant several hundred good-sized orchards. Note the straight trunks and vigorous growth, which is typical of Harrison-grown trees.

Apples---One-Year Budded

5/8 in. 5-6 ft.; 1/2 in. 4-5 ft.; 3/8 in. 3-4 ft.

12,500 Delicious	15,000 Stayman's Winesap
3,000 Gravenstein	5,000 Wealthy
7,000 Grimes' Golden	10,000 Williams' Early Red
3,500 Jonathan	3,500 Winesap
8,000 McIntosh	3,500 Winter Banana
3,500 Oldenburg (Duchess of Oldenburg)	8,000 Yellow Transparent

Apples---Two-Year Budded

3/4 in. 6-7 ft.; 5/8 in. 5-6 ft.; 1/2 in. 4-5 ft.

2,000 Delicious	8,000 Rhode Island Greening
4,000 McIntosh	2,000 Williams' Early Red
2,000 Paragon (Mammoth Black Twig)	2,000 Yellow Transparent

Write or wire while this offer is good. Ask for our wholesale list of all varieties.

HARRISONS' NURSERIES,
Berlin, J. G. Harrison & Sons, Maryland



THE NATIONAL NURSERYMAN



DECEMBER 1917

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

*Peach, Gooseberries,
Currants, Berberis,
Spirea Van Houtte,
Other Ornamental Shrubs,
H. P. Roses, Etc.*

Will be pleased to quote on your list of wants

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A large and complete line of high quality Nursery Stock for the wholesale trade.

CHERRIES; large stock in all varieties.

BLACKBERRIES; surplus of Ancient Briton, Rathbun, Erie.

ELM; American White—in car lots.

APPLE SEEDLINGS

Large supply of best quality. Grades unsurpassed.

APPLE GRAFTS—made to order. If short of labor, let us make your grafts for you. Satisfaction guaranteed.

Ask for Trade List and Bulletins. Send us your list of wants.

Reliable Holland Nursery Stock

OF EVERY DESCRIPTION



FELIX & DYKHUIS

WHOLESALE NURSERIES

Boskoop, - - Holland



Conifers, Rhododendrons, Roses
Young trees for lining out, etc.

Ask for Our Beautifully Illustrated Catalogue

You Know Us for Quality

We offer the most complete line in the East.

Heavy on,

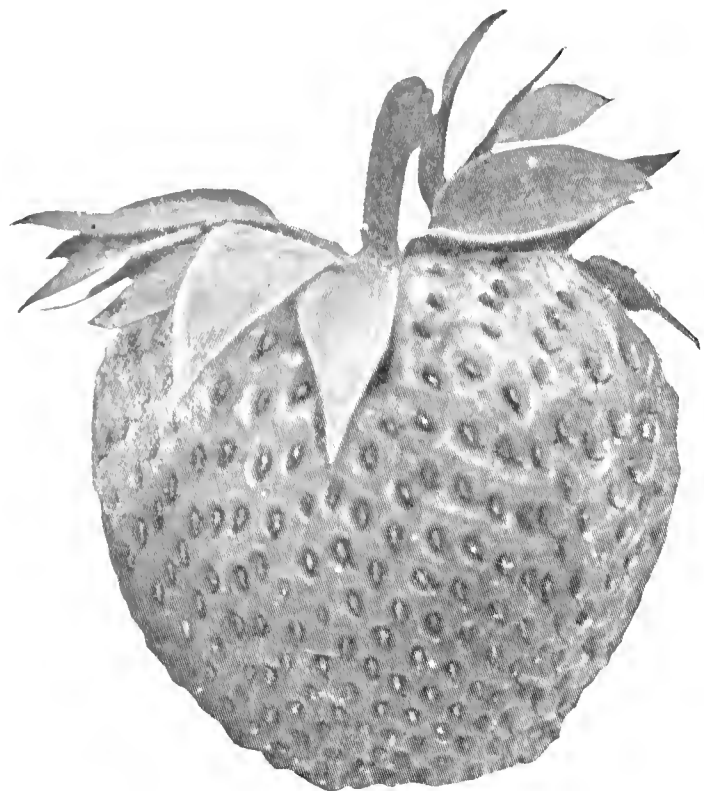
APPLES	ORNAMENTAL SHRUBS
CALIFORNIA PRIVET	BERBERRY THUNBERGII
SPIREA VAN HOUTEI	HYDRANGAEA P. G.
ROSES	PLANTING STOCK, ETC.

Pleased to price your list of wants.
Shipping service of the very best.



C. R. BURR & CO.

Manchester, : Conn.



Strawberry Plants

FROM NOVEMBER FIRST TO MAY FIRST

We supply leading fruit growers, nurserymen and dealers with fine strawberry plants.

Our plants are healthy, heavily rooted, and guaranteed *true-to-name*.

We grow all the leading standard and everbearing varieties.

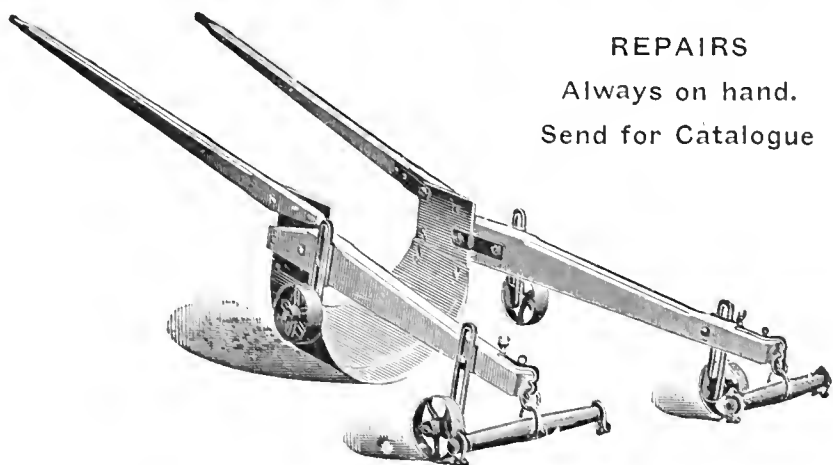
Get in touch with us regarding your supply for next season. Shipments made to you or direct to your customers. Packing unsurpassed.

The W. F. ALLEN CO., 100 Market Street, Salisbury, Maryland

1887

1917

BRAGG'S COMMON SENSE TREE DIGGER



REPAIRS
Always on hand.
Send for Catalogue

Digger gets All the Roots at the rate of Twenty to Forty Thousand trees per day, and only needs same power as plow.

L. G. BRAGG & CO.
KALAMAZOO, MICH.

FRENCH FRUIT STOCKS

Offered for Account of

VINCENT LEBRETONS NURSERIES
Angers, France

December or February shipment from France

Mahalebs, Myrobolans, Mazzards, Apple, Pear and Quince Stocks, etc. Also a full line of Ornamentals in lining-out sizes.

Advance prices now ready for Nurserymen.

HOLLAND STOCK

Norway and Schwedler Maples and other deciduous trees, Tree Roses, Boxwood, Koster Blue Spruce, Rhododendrons, Evergreens, Herbaceous Perennials, etc.

HARDY JAP. LILY BULBS

Such as Lilium AURATUM, RUBRUM, ALBUM, MAGNIFICUM, Melpomene, Roseum. Import prices. Case lots.

Fall or Spring Shipment

Write for prices

McHUTCHISON & CO. THE IMPORT HOUSE
95 CHAMBERS ST., NEW YORK

PAINESVILLE NURSERIES

ORNAMENTAL TREES

Deciduous and Evergreen

In great varieties and largest quantity.

SHRUBS

Full line of all leading types and varieties in use.

ROSES

Usual S. & H. quality; most varieties. Inquiries should state quantity of each variety desired.

HARDY PERENNIALS

Not too late to plant the sturdier kinds. We are booking Perennial stock by express only.

FRUIT TREES

Apples Pears
Plums Cherries
Peaches Etc.

—We are heavy growers and can make interesting quotations on your want lists.

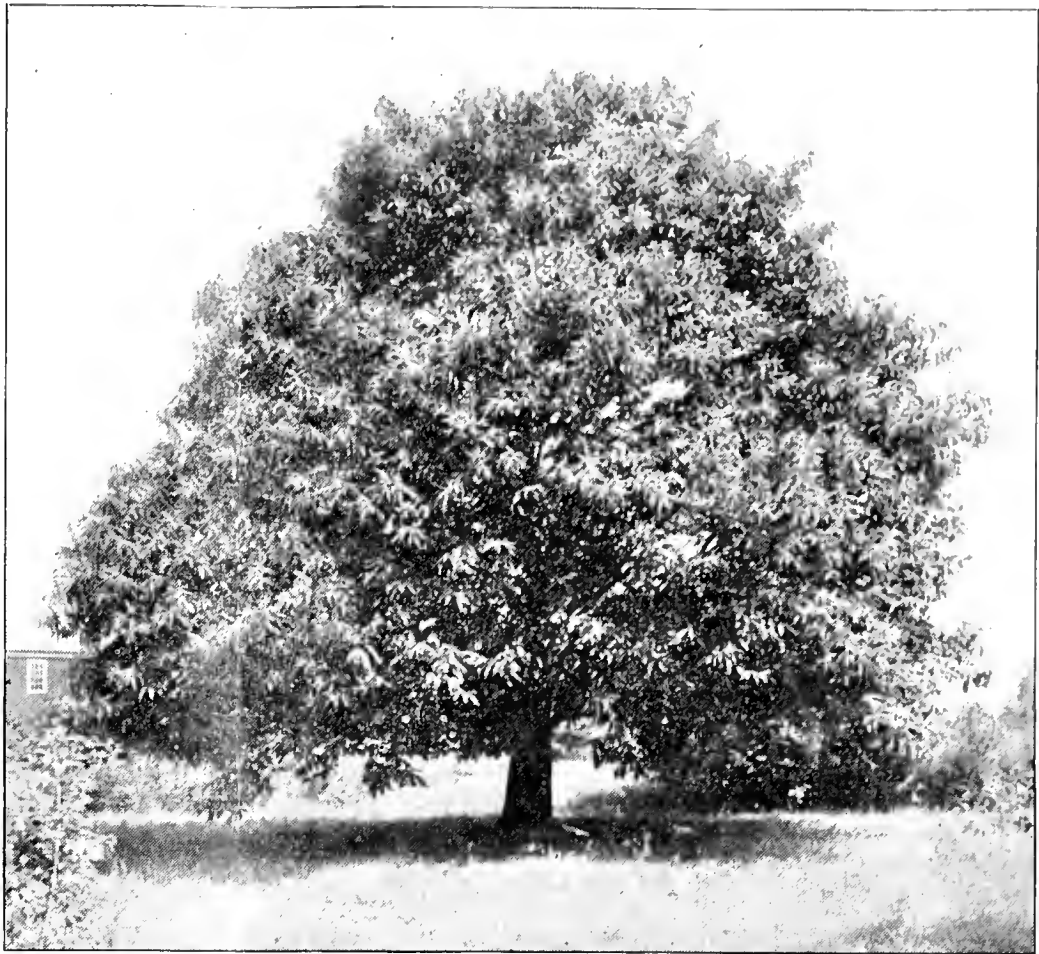
SMALL FRUITS

Grapes
Currants
Gooseberries
Raspberries, Etc.

—In quantity—in quality and at right prices.

LET US

have a chance to quote on your entire wants.



AMERICAN CHESTNUT



THIS AND SIMILAR BLOCKS OF FRUIT TREES, SOON IN CELLAR

THE STORRS & HARRISON CO.

NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

When writing to Advertisers please mention the National Nurseryman.

J. & P. Preferred Stock.


J. & P. Preferred Stock.

Not How Cheap, But How Good

is our slogan. It is our ambition to grow and sell the best there is in our lines,—because quality goods sell themselves, and at living prices. It isn't necessary to be always cutting under the other fellow.

We grow a pretty complete assortment but our specialties are—

Field-grown Roses	Ampelopsis Veitchii
Clematis, Large-flowering	Clematis Paniculata
Tree-form Hydrangeas	Tree-form Lilacs
Shrubs	Perennial Plants
Paeonias	Shade Trees

 Note: We sell to the trade only. Have no retail business of our own. Our trade customers get and are entitled to our very best stock and very best attention.



Jackson & Perkins Company

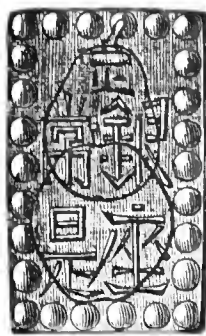
NEWARK

NEW YORK

J. & P. Preferred Stock.

J. & P. Preferred Stock.

Heikes—Huntsville—Trees



Established 1872

1500 Acres

**FRUIT TREES
ROSES and other
ORNAMENTALS**

For the wholesale trade.
All of our own growing.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

Hill's Evergreens

You can work up a good profitable trade in Evergreens if you have the right kind of stock. Our main specialty for over half a century has been the propagation of young Evergreen stock for the wholesale trade in immense quantities at low prices.

We have all the leading varieties in small sizes, for all purposes, suitable for lining out to grow on for your trade.

Nurserymen who have heretofore depended on Europe for their young Evergreen plants can now be assured of a good reliable source of supply right here in America, and we solicit the opportunity of quoting on your requirements.

"Made in U. S. A." and "American Stock for American Planters" should, from now on, more than ever, be the slogan of American Nurserymen for it means "money saved in the long run" to start with nice, strong, sturdy, vigorous American-grown stock which has been produced right here in America.

YOU want to keep posted on Evergreens;

WE want to become better acquainted with you;

Let's get together.



The D. HILL Nursery Co., Inc.

Evergreen Specialists

LARGEST GROWERS IN AMERICA

Box 401

Dundee, Ill.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS

BERRIES CLEMATIS

EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

70 Years

1000 Acres



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE



THE

North-Eastern Forestry Co.

CHESHIRE

...Connecticut...

OF OUR

Fall Trade List,

The Editors say:

"Positively the finest thing of the kind ever issued."
"Carries a note that rings true."
"Magnificent; distinctive and in a class by itself."

A Maker of Fine Catalogues says:

"The best-looking, best-devised and most attractive wholesale list I have ever seen."

Nurserymen say:

"Fine," "Superb," "Great," "Foolish waste of money," "Does it pay?" "If the stock is half as good as the pictures, we want some of it; here is an order." It is possible that in our new business, we may have failed to get the names of all our old friends on our mailing-list and that there may be others who would like copies of our list. They will be very gladly sent on request. The list is attractive, because it consists almost altogether of pictures of the stock offered for sale and because it is *good* stock; the list is expressive of the quality of the goods and service offered by a new wholesale firm catering exclusively to The Trade, and along modern business lines. May we send YOU a copy?

PRINCETON NURSERIES

November first.

At Princeton, in New Jersey.

J. H. Skinner & Co.

Topeka, - Kansas



Apple Seedlings,

Japan Pear Seedlings

Forest Tree Seedlings—Catalpa, Elm, Maple, Mulberry and Locust.

Fruit Trees—Apple, Cherry, Pear, Peach and Plum.

Rhubarb, Divided Roots, True Myatt's Linneaus

Grapes

Shade Trees

Flowering Shrubs

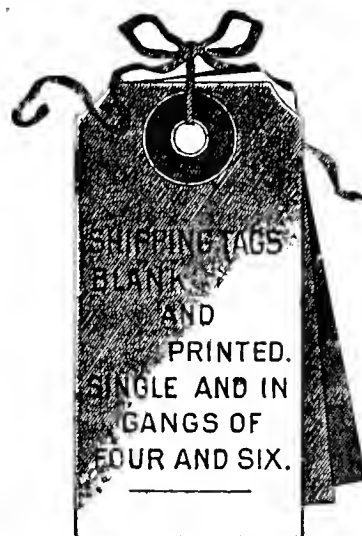
Paeonias

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

Rawhide Brand of Shipping Tags and Tree Labels

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

ORNAMENTAL

TREES, SHRUBS, VINES, EVERGREENS
HARDY HERBACEOUS PLANTS

225 Acres

Entirely devoted to the growing of the best quality of ornamental nursery stock.

WHOLESALE ONLY

We also grow the "unusual" things, you cannot find elsewhere.

Small Trees and Shrubs for
Planting in Nursery Rows.

We shall have our usual supply for Spring delivery. Catalogue ready January first.

RAFFIA HEADQUARTERS

Supply of our usual brands on hand at all times

Thomas B. Meehan Co.,
WHOLESALE NURSERYMEN

Dresher, - Penna.

Planting Stocks

They should be ordered NOW for timely delivery. No trouble about arrivals from France; the tonnage required for our men and materials sent "over there," insures ample space returning. Prices being practically the same, it is a question of quality and grades and packing and service. We merely remind our customers of the way their previous orders have been handled; those who have not yet tried us can get satisfactory assurances as to our goods and service from the one hundred sixty leading American nursery firms we have supplied. Glad to put YOU in touch with our satisfied customers in YOUR own state. Mr. Delaunay's complete list will be sent on request. But—get that order placed!

John Watson & Company

NEWARK - NEW YORK

November First

For Fall of 1917

*WE will have our usual line
of Ornamentals, Shade
Trees, Perennials, Apple,
Plum, Cherry, Peach, etc.*

C. M. Hobbs & Sons

Marion County

Bridgeport, - - Indiana

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

STARK BRO'S

Extra Heavy 2-Year Grape

Leading varieties, especially Concord. Strong tops and big roots, greatly preferred by the Retail Trade. Our heavy Extra No. 1 2-year grades will please your customers and cost no more than the ordinary No. 1 grade usually offered.

The vines we grow in Erie Co., Pa., in the fine grape soil along the South shore of Lake Erie, are unsurpassed.

In addition to Concords, we will have Moore Early, Niagara, Worden, and other standard varieties on which we will be pleased to quote.

Special prices for early buyers—send us your want lists.

Stark Bro's Nurseries

LOUISIANA, MO.

Grape Nurseries in Erie Co., Pa. Best Grape Soil in America

The Best In Nursery Products

We carry a full line of fruit and ornamental trees, evergreens, shrubs, etc. Send us a list of your wants.

A FEW SPECIALS

Oriental Planes from 1¼ to 3 inch caliper. A large stock of Sugar Maples, American Elms, Beech grafted River's, and Fern-leaved, Double Flowering Japan Cherries, Prunus Pissardi, Flowering Apples, Flowering Peaches, Magnolia Tripetela, Japan and American Judas, Japan Walnuts, American Arbor Vitae, Hemlock and Norway Spruce, Altheas, Forsythias, Philadelphus, Viburnum Plicatum, Weigela, Eva Rathke, etc.

Downing Gooseberries, 2 years No. 1.

HOOPES BRO. & THOMAS COMPANY

THE WEST CHESTER NURSERIES

Established 1853 West Chester, Pa. Incorporated 1907



BERRY'S Wholesale Nursery

Small fruit plants in variety; rhubarb; horseradish; California Privet; Barberry Thunbergii; Hydrangea P. G.; Spiraea Van Houghti; Peonies, etc.

See list before placing your order.

P. D. BERRY

Dayton

Ohio

We Are Prepared To Supply The Trade

ROSES, Field-grown, own roots and budded.
ABELIA GRANDIFLORA. Transplanted, field-grown.
BERBERIS JAPONICA.
AZALEA INDICA, (Home-grown).
GARDENIAS.
ENGLISH LAUREL.
MAGNOLIA GRANDIFLORA.
MAGNOLIA FUSCATA.
OLEA FRAGRANS.
CAMPHOR (pot-grown).
LIGUSTRUM JAPONICUM, LUCIDUM, NEPALENSE,
and other good varieties, fine bushy plants.
SATSUMA ORANGE. Field-grown, budded on Citrus
Trifoliata.
BIOTA AUREA NANA (Berckmans' Golden Arbor-
vitae)
BIOTA AUREA CONSPICUA.
RETINISPORA. In variety.
JUNIPERUS. In variety.
WISTARIAS. Grafted, best sorts.
APPLES.
JAPANESE PERSIMMONS.
ENGLISH WALNUTS.
MULBERRIES.
SPIRAEA THUNBERGII. A beautiful lot of stocky
plants.

A fine stock of Hackberries, Koelreuteria, Tulip Poplar, Magnolia, Purpurea, Texas Umbrella, Sycamore and Elms.

Send us a list of your wants and let us give you quotations.

P. J. BERCKMANS CO., Incorporated
Fruitland Nurseries, Augusta, Georgia

STRAWBERRY PLANTS

All the leading Standard and Everbearing varieties. Have a nice stock of PROGRESSIVE, SUPERB AND AMERICUS, true to name. My plants are well-rooted, strong and healthy. They are pleasing a large number of Nurserymen and Dealers and they will please YOU and YOUR CUSTOMERS if you use them. IT WILL PAY YOU TO USE THEM. Will ship to you or direct to your customers. Send your list for prices.

LEAMON G. TINGLE, 165 Railroad Ave., Pittsville, Md.

French Nursery Stock



We grow all Outdoor NURSERY STOCK including FRUIT ORNAMENTAL, FOREST, ROSE STOCKS, Etc.

We have a large stock of ROSE TREES, also NEW and RARE TREES and SHRUBS, HARDY HERBACEOUS.

Our wholesale catalogue, most complete, exceedingly interesting, is at the disposition of the Nursery Trade.

If you have not received it, write to us.

E. TURBAT & CO.

NURSEYRMEN

ORLEANS - - - - FRANCE

35,000 PEONY ROOTS FOR SALE

Must reduce my Stock

40 varieties to select from. I have them from the cheapest to some of the finest in the world.

Guaranteed true to name.

Send for list of varieties and prices

Address

P. D. BERRY,

Dayton

Ohio

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Fall 1917

GRAPE VINES—One and two years old. Varieties largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas. Free from weed seeds, all recleaned and guaranteed first class.

Correspondence solicited. Price list upon request.

CHAS. M. PETERS

P. O. Address, Salisbury, Wicomico County, Md., R. F. D. 3

Long Distance Phone and Telegraph, Salisbury, Md.

The Framingham Nurseries

200 Acres

High Grade
Trees Shrubs,
Evergreens,
Vines, Roses,
Etc.



Fine Stock

of
Rhododendrons
Kalmias
and
Andromedas

Send for Price List

W. B. WHITTIER & CO.

FRAMINGHAM, MASS.

We have a splendid stock of Grape Vines

and other small fruit plants for the Nursery trade, graded up to the highest standard and sure to please you.

Give us a trial order, send in your list now for quotations

A. R. WHELOCK

SUCCESSORS TO
WHELOCK & CONGDON

North Collins,

N. Y.

PAEONIES, Standard Varieties

30 Acres for Commercial Purposes

Write for Prices

Gilbert H. Wild

SARCOXIE,

MISSOURI

REMEMBER!

If its a hardy perennial or so called old fashion flower worth growing, we have it in one shape and another the year round. We have the largest stock in this country, all Made in America, and our prices—

Why say more here. Send for our Wholesale price list of varieties and benefit from the opportunities this affords you.

Our motto: "Maximum Quality, Minimum Cost."

Address, R. W. Clucas, Mgr.
Palisades Nurseries, Inc. Sparkill, N. Y.

You can save **Time and Money**

If you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

Sarachan & Rosenthal

64-66 Hanover Street

Rochester, - - New York

Vincennes Nurseries, W. C. REED, Prop
VINCENNES, - - INDIANA

Prepare for Fall by securing the best Cherry to be found
 Our blocks of Cherry are the largest in the U. S. and quality the best. While the U Boats have been sending Mahalebs to the bottom the past two years, we have been fortunate in securing our usual supply and will have a splendid lot of trees to offer in the following:

CHERRY TWO YEAR general list of varieties
 CHERRY ONE YEAR 11-16 up Sweets and Sours
 PEACH ONE YEAR leading varieties
 PLUM Japans, European and Hansen Hybrids
 COMPASS Cherry and Apricots
 APPLE leading varieties in connection with other stock only
 Grafted English Walnuts and Northern Pecans

Special prices to car lot buyers on large orders

WE OFFER

Grape Vines, Currants and Gooseberries
 in all varieties and grades

—also—

Grape and Currant Cuttings and Light
 Grade of Vines for Lining Out
 in Nursery Rows

WRITE FOR PRICES

F. E. SCHIFFERLI, Fredonia, N. Y.

We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.
 Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER - - MARYLAND

We offer for Spring 1918

200,000 CALIFORNIA PRIVET, 1 year and 2 year
 1/2 million ASPARAGUS, 2 year and 3 year
 DOWNING GOOSEBERRY PLANTS, 2 year
 BARBERRY THUNBERGI, 2 and 3 year transplanted

Can supply the above stock in car load lots or less, also, have a large stock of Rhubarb, Cumberland Raspberry Plants, Spireas, Deutzia Assorted, nice specimen plants. Evergreens, Horse Chestnut, N. Maple, Lombardy Poplar and Planes, etc.

We will make attractive low prices for early orders
 Send List of Wants

For FUMIGATION With
HYDROCYANIC ACID GAS

"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by
The Roessler & Hasslacher Chemical Co.
100 William St. - - New York, N. Y.

WOOD LABELS

For Nurserymen and Florists

The kind that give satisfaction

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

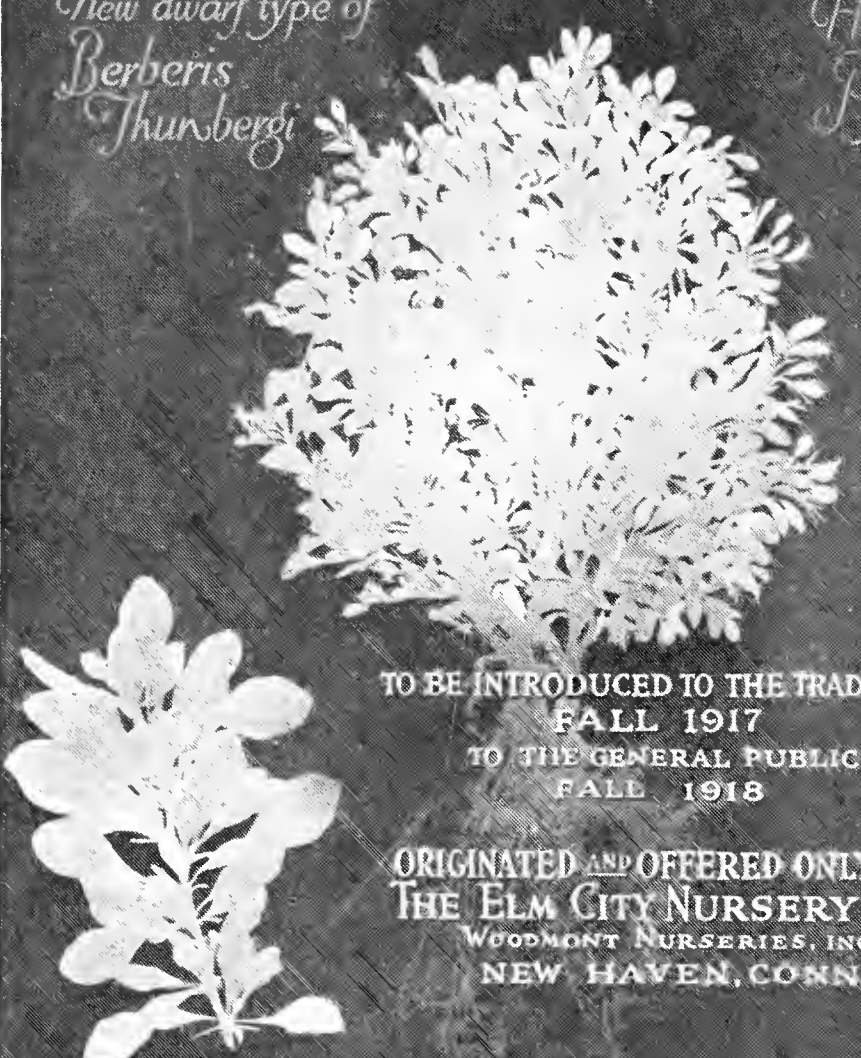
Samples and prices are at the command of a communication from you.

Dayton Fruit Tree Label Co.

South Canal St., Dayton, Ohio

Box-Barberry
New dwarf type of
Berberis Thunbergi

New Ideal Hedge Plant



TO BE INTRODUCED TO THE TRADE IN
FALL 1917
TO THE GENERAL PUBLIC
FALL 1918

ORIGINATED AND OFFERED ONLY BY
THE ELM CITY NURSERY CO.
WOODMONT NURSERIES, INC.
NEW HAVEN, CONN.

*Natural Size of
Box-Barberry Foliage*

Inquire for Prices

COPYRIGHT JULY 1917

Box-Barberry

Dwarf type of

Berberis Thunbergi

New Edge and Dwarf Hedge Plants

ORIGINATED at our Nursery sixteen years ago among a batch of Japan Barberry seedlings. It attracted attention in the seedling bed and has been under careful watching since. The original plant is now about 2½ feet wide, and globe-like in shape, its natural form.

It is pronounced a most valuable find by all who have seen either the original plant or the stock we have propagated from it, including experienced nurserymen, landscape architects and gardeners, experiment station men and amateurs.

The public will take to it immediately. It's just what is wanted. As a formal-garden edge plant it is ideal;—this means thousands of it for many a single order. Equally desirable as a low and medium hedge plant, assuring a heavy demand. Trims into perfect formal specimens.

Propagates readily from either hard or soft wood cuttings. Will not come true from seed.

Offered to the Trade Fall 1917—No Restrictions

Offered to the general public and will be freely advertised in Fall 1918 and Spring 1919. Get up a stock and be ready for the certain heavy demand.

The Elm City Nursery Co.

Woodmont Nurseries, Inc.

NEW HAVEN

CONN.

New Nurseries at Woodmont, Conn.

PLAINVIEW NURSERY FOR SALE

A good paying business in every respect. Also a large stock of heavy apples to offer the wholesale trade. If interested, write us.

PLAINVIEW NURSERY, - PLAINVIEW, TEXAS

Hardy Ferns 11 NAMED VARIETIES

Illustrated descriptive list mailed free.

Ludvig Mosbaek, Ferndale, Askov, Minn.

UR reading this advertisement. Yours in the NATIONAL NURSERYMAN

Would be Read by Thousands

Address HATBORO, PA. office for Rates

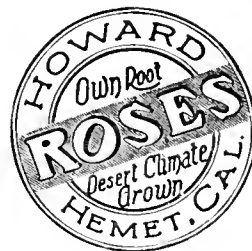
WHOLESALE ONLY

Own-Root-Field-Grown-Roses

Shipments January 1, 1918, to
March 15, 1918

By Express the "safe method." And you better have your order booked now while the assortment is good. Write for price list. Try Climbing Sunburst.

HOWARD ROSE COMPANY,
HEMET, - CALIFORNIA.



Unusual and rare stock in great variety; hardy Bamboos, Palms, Crapemyrtles, fruit and Economic trees and plants, etc., etc., from all over the world.

New additions constantly being tested. Ask for complete descriptive catalog, and wholesale rates. 34th year.

REASONER BROS.,
ONECO - FLORIDA.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK
The National Nurseryman Publishing Co., Incorporated

Vol. XXV.

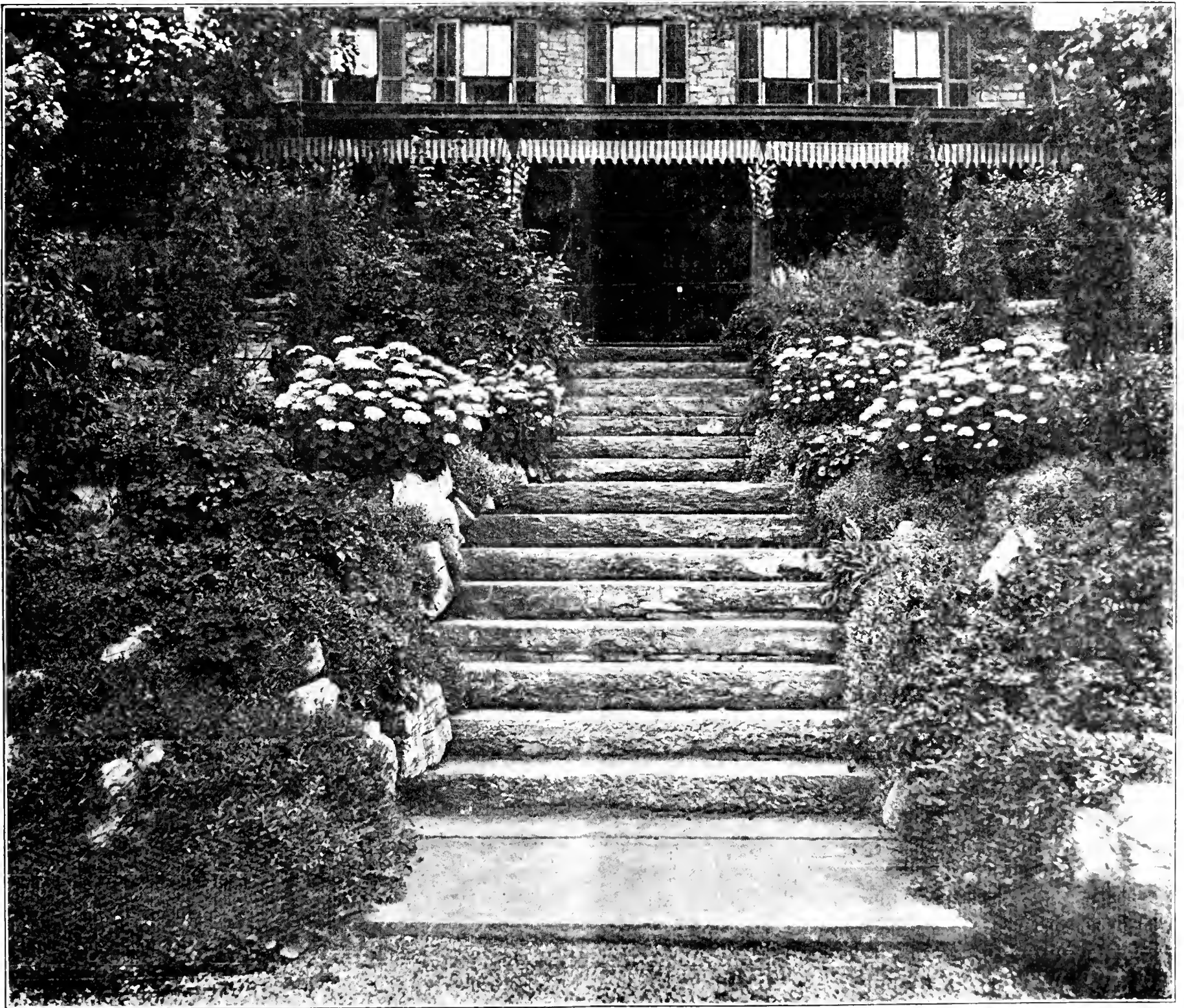
HATBORO, PENNA., DECEMBER 1917

No. 12

TERRACED ROCK GARDEN

Men are very much like sheep in thought and action, they will all follow their leader, and nowhere is this so much in evidence as in planting around their homes. If one man plants a Norway Maple, or encloses his lot

one sees originality displayed in the treatment or arrangement of grounds. Take for instance the average front yard. Even in localities where the grades are very steep one seldom sees anything but a strained effort to



A terraced lawn converted into an interesting Rock Garden

with a Privet hedge, the chances are his neighbors will do likewise, so that planting in a particular neighborhood becomes very stereotyped, which carries with it a tiresome monotony.

This is also true of nurserymen planters. It is rare

bring everything to levels and lines. While perhaps there is nothing simpler and better than a nicely clipped sod, there are many yards and positions that lend themselves to an entirely different treatment.

Who has not seen especially in a hilly or rocky coun-

try wonderful opportunities lost where it would have been better to make a rock garden than have the all-prevailing terraced levels.

The illustration will give some idea what is meant. Can anyone imagine a prettier and more fitting treatment for a small property on a side hill?

The upkeep, care and attention is no more than grass would be, in fact, it is doubtful if it would be as much.

It would, however, require interested attention to re-plant occasionally, fill in, weed and water.

The one essential is the proper placing of the rocks so that they will not look artificial and formal and so as to form crevices and pockets that will contain soil of sufficient body and depth to support plants. The conservation of moisture is the big thing in building the rock garden. The next of importance is the proper selection of plants. There are plants to suit every situation and condition of soil and exposure and when properly selected make an interesting display from early spring until late fall.

ANTOINE WINTZER'S OPINION OF THE BOX-BARBERRY

The Conard & Jones Co., West Grove, Pa., U. S. A.

October 31, 1917.

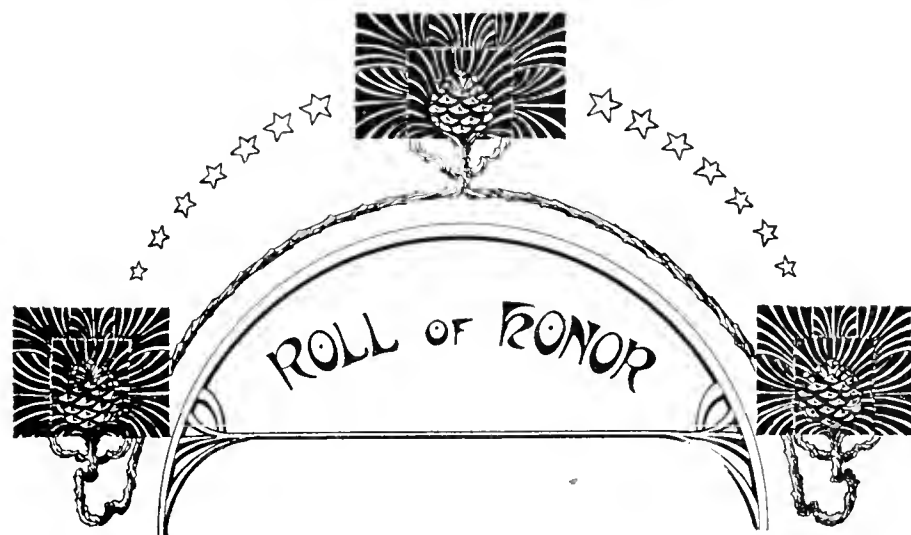
The Elm City Nursery Co., Woodmont Nurseries, Inc.
New Haven, Conn.

I received your very kind letter of October 16th today, and am glad that you remember the short visit I enjoyed while at your place last August. It was a red letter day for me, to converse with friends engaged in the same cause, trying to make this beautiful world more beautiful by the earnest work of our hands and minds. I shall early try to see your beautiful place again.

The Box-Barberry is in the opinion of the writer one of the best hardy plants introduced in many years, and will become a great popular favorite when its many good points become known. Extreme hardiness, clean graceful habit of growth combine to make it one of the most desirable and useful hardy plants in cultivation. I can well imagine a block of it clothed in its regal glowing fall coloring at this season. It will be desirable in many ways; as an individual plant, it is more beautiful than the Boxwood, more graceful and less formal; in groups also it will be charming in its natural form; as a hedge plant it will have no superior, as it will require less care and attention to keep it in good form than the majority of plants used for that purpose. I think it will prove highly satisfactory and an advertisement in itself wherever planted. Hundreds of millions of it will be planted in this country in the near future. I believe you are taking the best course for its introduction and dissemination. It will be a winner all right. By getting the buying public a little hungry, they will take to it all the better by having to wait a while. Allow me to congratulate you for placing such a good hardy plant on the market. I merely give my opinion of Box-Barberry as I have seen it and firmly believe in it.

With kind regards,

Very truly yours,
ANTOINE WINTZER, Vice President.



IT is the purpose of the National Nurseryman to publish a roll of honor consisting of the names of those nurserymen serving in the United States army in the present war. We shall appreciate it if our readers will send us their names and photographs if possible.

Charles R. Smith, Aviation Section of the Signal Reserve Corps, Aviation Camp, San Antonio, Texas.—Smith Bros. Nursery Company, Concord, Ga.

Stuart Perkins, Wireless Operator, Special Radio School, Cambridge, Mass.—Jackson & Perkins Co., Newark, N. Y.

Wade Muldoon, Sergeant, Headquarters Military Police, Camp Hancock, Ga.—Thomas Meehan & Sons.

George Taylor, Battery "F," 108th U. S. F. A., Camp Hancock, Georgia.—Thomas Meehan & Sons.

Carroll A. Bagby, Capt. U. S. Infantry—New Haven Nurseries, New Haven, Mo.

Oliver W. Bagby, Lieutenant, U. S. Navy—New Haven Nurseries, New Haven, Mo.

Ralph B. Bagby, Lieutenant, 24th U. S. F. A., Fort Riley, Kansas—New Haven Nurseries, New Haven, Mo.

Lew W. Bagby, Lieutenant (Junior Grade) U. S. Navy—New Haven Nurseries, New Haven, Mo.

Paul Rathert, Battery F., 128th U. S. F. A., Ft. Sill, Oklahoma, New Haven Nurseries, New Haven, Mo.

Charles Schwentker, Battery F, 128th U. S. F. A., Ft. Sill, Oklahoma—New Haven Nurseries, New Haven, Mo.

Robert E. Bagby, Cadet, Senior Class, United States Military Academy—New Haven Nurseries, New Haven, Mo.

Harold J. Bagby, Enlisted Medical Reserve Corps—New Haven Nurseries, New Haven, Mo.

Lloyd C. Stark, Major of the Field Artillery, Fort Sill, Okla. Vice-President and a Director of Stark Bros. Nurseries and Orchards Co., Louisiana, Mo. President of the National Association of Nurseries.

Meredith P. Reed, Captain, Sixth Company Section U. S. Officers' Reserve Corps.—Vincennes Nurseries, Vincennes, Indiana.

William Flemer, Jr., F. & F. Nurseries, Springfield, N. J. Private U. S. Expeditionary Force, Ambulance Corps, Battalion No. 23, Section No. 23, France.

Clay M. Stark, Stark Bros. Nurseries & Orchards Co., Louisiana, Missouri. American Field Service. Now in France.

Lawton V. Smith, nephew of the Smith Brothers, of Concord Nurseries, of Concord, Ga., now a lieutenant in the Aviation Section of the Army, and stationed near Toronto, Canada.

Philip Rouse and Julian Rouse, nephews of the Smith Brothers, now in the Naval Reserve, with headquarters at Jacksonville, Fla.

The North Eastern Forestry Co., Cheshire Conn.

THE North Eastern Forestry Co., was organized by men who were interested in forestry and as they were located in the north-eastern section of the United States they adopted that name for their business.

The aim and intent of the business is to grow and

they have had so much call from nurserymen for a good grade of stock for lining out they have gradually gone into the raising some of the choicest evergreens for ornamental planting.

These they grow to larger sizes for the nursery trade



Three-year White Pine Transplants, The North Eastern Nur. Co.

supply stock for forestry purposes. Stock that would be native grown, free from disease and pests and freshly dug, at reasonable prices.

While they have adhered very closely to the original plan of growing, mainly conifers, for forestry planting

but do not larger ornamental trees or cater to the retail trade.

Mr. F. S. Baker the able superintendent reports a rapidly increasing business and it is with much pleasure we reproduce the accompanying cuts which give a good idea of the scope of this growing concern.

THE PLANTING OF ORNAMENTALS

Summary of address by I. E. Long, Mgr. Landscape Department Ashford Park Nurseries before meeting of the Southern Nurserymen's Association, Atlanta, Ga.

In recent years the American people have shown a great improvement in their standards of good taste in architecture and the decoration of their homes.

We no longer think of an ornamental planting as something intended only for the millionaire class with a large country estate. We now realize that the smallest lawn should be carefully planned and planted, as the planting of the home grounds is becoming an essential part in the development of the residential site, and the proper setting of the house is becoming as important as the plan of the building or the interior decorations.

Ornamentals are the materials with which we make

the landscape compositions. Ever having in mind that we are painting a picture which will show the house properly framed with a background and skyline harmonizing with the general surroundings.

An unlovely view will suggest the introduction of a clump of plants to screen that which is unsightly and produce a note of interest in the place.

A barren uninteresting lawn will require trees that are large enough to produce a pleasant play of light and shadow on a scene that would otherwise be most monotonous, the trembling leaves and swaying branches are ever a source of delight and excite the emotions of the sublime. Trees are of slow growth and should be planted rather thickly at first and gradually thinned out as the occasion demands leaving each stand out in its majesty showing a clear cut outline.

The appearance of a man's home is of as much importance as his personal appearance and from the fact that we enter his home at the entrance to the grounds it is

expedient that the attractiveness begin at the gateway and that we should plant for the joy of others as well as ourselves. The beautifying of the surroundings is an influence in the community for that which is artistic and attractive.

It is not given to all to observe in detail all the parts which make up the beautiful composition, but by an arrangement of planting that will lead the eye to the beautiful vista the composition as a whole becomes a decided feature in the landscape.

It is very important that the house be set snugly on the contour of the ground, so when a building is stilted or has the appearance of being unstable, there is every reason for a mass planting at the base to sit the house to the ground and provide a harmonious blending from lawn to wall.

The attractive planting gives publicity to property and the more it is the more widely it is advertised, so apart

from the beautiful and sentimental reasons for adornment, as a matter of investment there is ample justification for abundantly planting the home grounds.

In summing up correctly, the reasons for planting ornamentals may be advanced as follows:

First. To create that which is delightful out of that which is ugly and commonplace.

Second. To create an atmosphere of pleasure in surroundings which are crude and devoid of interest.

Third. To provide a sequence of leaf, twig, flower and fruit in barren places.

Fourth. To manifest an interest in Nature's gifts by assembling and caring for them.

Fifth. To give a personal note to our habitation and to provide a source of recreation and a stimulus to mind, body and soul.

Sixth. To re-create scenes which bring back memories of the past and awaken emotions of joy and inspiration.

The Relation of the Large to the Small Grower

Address Before Texas Nurserymen's Association at College Station, August 27th, 1917.

By Samuel L. Dale, Daingerfield, Texas.

SO important is the subject of "The Relation of the Large Grower to the Small Grower" that I approach it with trepidation.

Yet close relationship is the object, the purpose, of this Association. What do we meet here for? Not for our health, surely not altogether for pleasure; but we should be here for the benefit of the nurseries of Texas generally, and in the interest of the members of this Association in particular. Do we always keep this object in mind?

To answer this we will have to go back some seven or eight years to the only time I ever attended the Texas Nurseryman's Association. Now as I see it, I must of necessity be very plain and shall speak of how it appeared to us small growers, (ie), men who grow 100,000 or less. It seemed a cut and dried affair. Mayor Smith, Captain Jones and Colonel Snider made nice talks and ran things generally. We little fellows were invited to join. We did. We walked up, paid our little dollar and retired gracefully, many never to return. That meeting was no particular advantage to us. We wanted no more. Even the social part was wanting.

But mistakes are not failures by any means, and the Association, though not strong and healthy as I should like to see it, is still living, and I hope working to a higher purpose, both for the benefit of the Association and the thousand in this broad land who plant trees and shrubs. For as an Association and as individuals, we should be satisfied to grow only the best.

When Messrs. Munson and Ker, our able President and Secretary, wrote me such a nice cordial invitation to meet with the Association again last summer, I decided to attend, but was unavoidably detained. This year I was anxious to be with you, but ill health prevents.

Now, Gentlemen of the Fraternity, rest assured that I am in full accord, full sympathy, with every honest grower in our state, be he large or small, for he has more real hard work twelve months in the year, with no vacations, and requires more money to do business than any business I know. Even the banker can do *much* business on deposits, but the nurseryman must deposit *much* before he can do business at all.

January 1st, 1916, there were 513 dealers, greenhouses and nurserymen in Texas. My badge book for the present meeting shows 27 registered members, a fraction over 5%. What a showing!

Let us change this. What we want to do, what we must do if this Association is to be a success, if it is to fill the purpose of its organization, if it is to accomplish its great purpose in filling the needs of so great a state as Texas, is to get together. To do this each member, yes each nurseryman, must feel that he is a part of this Association, that he is personally benefited and personally interested in its success. That the Association is his and that he is part of it. Then, and not till then, shall we fill these halls with his smiling presence.

First, then there should be, must be, a good social time—hail fellow, well met. Each member should endeavor to make it enjoyable; bring his wife and daughter if he can and really enjoy the occasion.

But, Gentlemen, we should meet to do business. This should be the chief aim, for we small growers are not burdened with extra time and our spare change gets down to about normal along about this season of the year, so that it should be made to be worth while to attend from a business point of view.

Now my idea is that this should be a real live business concern, and this *the* business meeting. Form a purchas-

ing agency to buy everything we need at the factory, tags, labels, burlap, lumber, shingle tow, etc. If we save ten per cent, it will mean hundreds of dollars to us. Our agent could get wholesale prices delivered say at Dallas or Waco, some central place decided by vote for that matter; could order just what he wanted, boxed and shipped to each party. Say I want 15,000 labels at 85c. I would send the agent my check for \$12.75. They would come to the distributing point and railroad would forward on to destination. We would soon find agents of these factories meeting with us at our annual meeting place.

Again, it seems to me that the large growers are not making the proper effort to hold the trade which legitimately belongs to them. Of course, they are to be the judges as to whether the effort is worth while. For most of us small growers when we can't trade with, i. e., can't find what we want with each other, buy of Alabama, Tennessee or Kansas nurserymen. Of course this should not be. We should barter, trade, and buy with our home nurseries wherever possible. For instance, I have a fine lot of Sycamore 10 to 12 feet at 15 to 18 cents F. O. B.; also Silver Maple 6 to 8 feet or 10 feet, some Umbrella, China, Peach, Plums, etc. I shall have to have a lot of

Figs, Cape Jasmine, *Magnolia grandiflora*, Arborvitae and all my roses. Why should we not exchange and keep our money at home, instead of sending it to Kansas or elsewhere, to people who never have and never will trade a dollar with any of us? But if our larger growers will allow the foreign (out of state) nursery make us better prices, and then fill his own shortage from the same source, what else is he to expect?

Now to conclude, if we will, for we can if we will, make this Nursery Association a mutual benefit organization for every member of it, it will soon take on new life and fairly hum with vigor and success. The railroad would then gladly acknowledge us, give us reduced rates to our meetings, not that we are not entitled to them now, for we are, as the bulk of our very large shipments, hundreds of thousands of dollars every fall and winter go by express. Still, we are not appreciated enough to get reduced rates anywhere, unless we club in with some other organization.

Then let us get together for a long pull, a strong pull, for the full development of our order, and the greatest benefit to the large farming class which we supply. This in duty to ourselves and in justice to them.



Results of the fire which destroyed the Storage and Packing Houses of the Thomas B. Meehan Co., Dresher, Pa.

Dresher, Pa., November 5, 1917.

Ernest Hemming, Editor,
Flourtown, Pa.

Dear Sir:—

I was very much interested in reading the communications between Lewis Roesch and J. R. Mayhew, which appeared in the November issue of *The National Nurseryman*, and particularly in that part of Mr. Mayhew's letter relative to the organizations within the National Association. I quote from his letter:

"In fact I am reliably informed that the Protective Association expected to go out of business in favor of the parent association at its last annual meeting, but the organization of the American Association was not prepared to take over the work."

I have been secretary of the Protective Association for

about twenty-five years and never missed a meeting, and I can say that the subject of being taken over by the National Association was not discussed, or considered directly, or indirectly either at the Milwaukee or Philadelphia meetings, nor do I believe that the subject has ever been seriously considered by any member of the Protective Association.

An organization which has been in existence for as many years as the Protective Association, would give serious consideration to any proposition to abandon its work even in favor of the National Association.

I am inclined to think that someone was handing out a little "josh" to Mr. Mayhew.

Very truly yours,

THOMAS B. MEEHAN, *Secretary*,

American Nurserymen's Protective Association.

How We Build a Mail Order Business

By H. G. Hastings, Pres. H. G. Hastings Co., Atlanta, Ga.

*Read before the Meeting of the Southern Nurserymen's Association, Atlanta, Ga.,
August 29th and 30th, 1917*

WHILE there is a marked difference between the character of goods handled by the nurseryman and the seedsman, yet our system of handling orders may prove interesting and methods of advertising, correspondence, shipping and filing may give the nurseryman ideas of value for his own business.

There are, however, a few fundamentals that observation shows as applying to all mail order businesses, and the one above all others, is that no mail order business, be it seeds or any other sort of merchandise can start big, or be a real money-maker from the start. Every large mail order seed or plant house, every one of the successful general mail order houses, such as Montgomery-Ward & Co., or Sears-Roebuck, have grown from small beginnings, grown gradually in size as they grew in confidence of the public through fair dealings and fair advertising.

Unless a man has patience, grit and sufficient capital or backing to carry him for five to seven years without material profit, he had better not make the start, for he is not of the mail-order house pattern. This may not be fully true along general mail order lines where there is opportunity for more frequent turn-over of stock, but it is absolutely true as to seed, plant and tree concerns where the turn-over or sales of stock produced is limited to once a year or a longer period.

Our beginning was in a small town in Florida, and seven or eight hundred feet of floor space was ample for three or four years. Also a force consisting of myself and a twelve-year-old boy were ample force to take care of all orders for the first three years.

Our recollection is that our first year's sales amounted to some \$2,800.00, which gave both the proprietor and his working force plenty of time to go fishing or any other form of amusement after the day's orders were filled.

This business was continued at the original location for some ten years, at the end of which time annual sales had reached nearly nineteen thousand dollars. During these slow years, however, came time for learning the business and analysis of conditions. With the years came a realization that our location was wrong. We were too far south for the establishment of a mail order business in our line, solely and simply for the reason that the practice and habit of a hundred years or more of seed-buying had been from locations north or east of the buyer.

We were located some sixty miles south of Jacksonville, Florida, just in the northern edge of the peninsular part of the state. Once our reputation was fairly established for reliability, we had little difficulty in getting a good share of the seed business to the south of us, but getting business from those parts of Florida to the north and west of us was like pulling teeth. Georgia and Alabama would not look at us. Further, we were located on a branch line railroad and it often took almost as long for a customer living a hundred miles away to get seeds from us as it would if he sent his order to Baltimore or Phila-

delphia. This slowness was due to bad railroad connections, slow trains, etc.

We were ambitious to have a real sizable business, and we knew it to be impossible with the limitations imposed by our original location. This, together with the wiping out of our other interests in the way of orange groves and citrus nurseries by the freezes of 1895 and 1899 determined us to move, which we did in the fall of 1899, coming to Atlanta.

In those days the South as a whole had no mail seed house of any consequence. We saw no reason why the South should not have a mail order seed house, just as the North had its Henderson's, Burpee's, Vaughan's, etc. The field was absolutely open to us, and we had a vision of a coming development in the South which is now in process of realization.

Atlanta was chosen after a careful study of conditions by us. First, it was probably the best and most favorably known city in the South, and second, its railroad facilities were the best for quick distribution of goods by mail, express or freight; third, there is a certain amount of prestige which comes from doing business in or being located in or near one of the larger cities.

From a mail order standpoint this is not an invariable rule, this matter of city location. The exceptions, however, are rare. We know of only notable exception in seeds, two or three in nursery and plant lines.

We came to Atlanta eighteen years ago. We opened up with four employees brought from Florida and a negro porter. We had some vague imaginings that as soon as it became noised around a little that we had opened up in Atlanta that the orders would come rolling in from Georgia and Alabama in sufficient volume to swamp us.

Those first two or three years disillusioned us. In the first place the Cotton Belt was just beginning to recover from a long period of business depression. A nickel then looked bigger to a farmer than a dollar does now and he hung on to every stray nickel that came his way.

While our Florida business largely stuck to us, before we could get Cotton Belt business we had to convince an entirely new set of people of the reliability of our house, the quality of our seeds, etc. We were further handicapped by the fact that there never had been a mail order seed house in the South and folks in the South just naturally shied off from the idea that there could be such a thing.

I don't like to recall the details of those first seven years' struggle in Atlanta. It's not a comfortable thing to go over even viewed from a point of a fairly successful career. It was seven years of hard, day and night plugging, advertising and pushing the merit of our goods in every way we possibly could.

Despite the temptation to do otherwise, however, we absolutely stuck to the high standard we set of never send-

ing any goods to a customer that would not, to the best of our knowledge, please and satisfy him.

We did not look at the present any more than the business exigencies forced us to. By some miracle our heads stayed above water while we spent every energy establishing a reputation for good seeds and fair dealings. We knew that without such a reputation ultimate success was impossible.

Despite all the difficulties we went through with, there was never a doubt of ultimate success. In later years it has seemed to me to be the cause of much failure in the business world, a lack of self-confidence and a lack of full belief in one's particular business proposition.

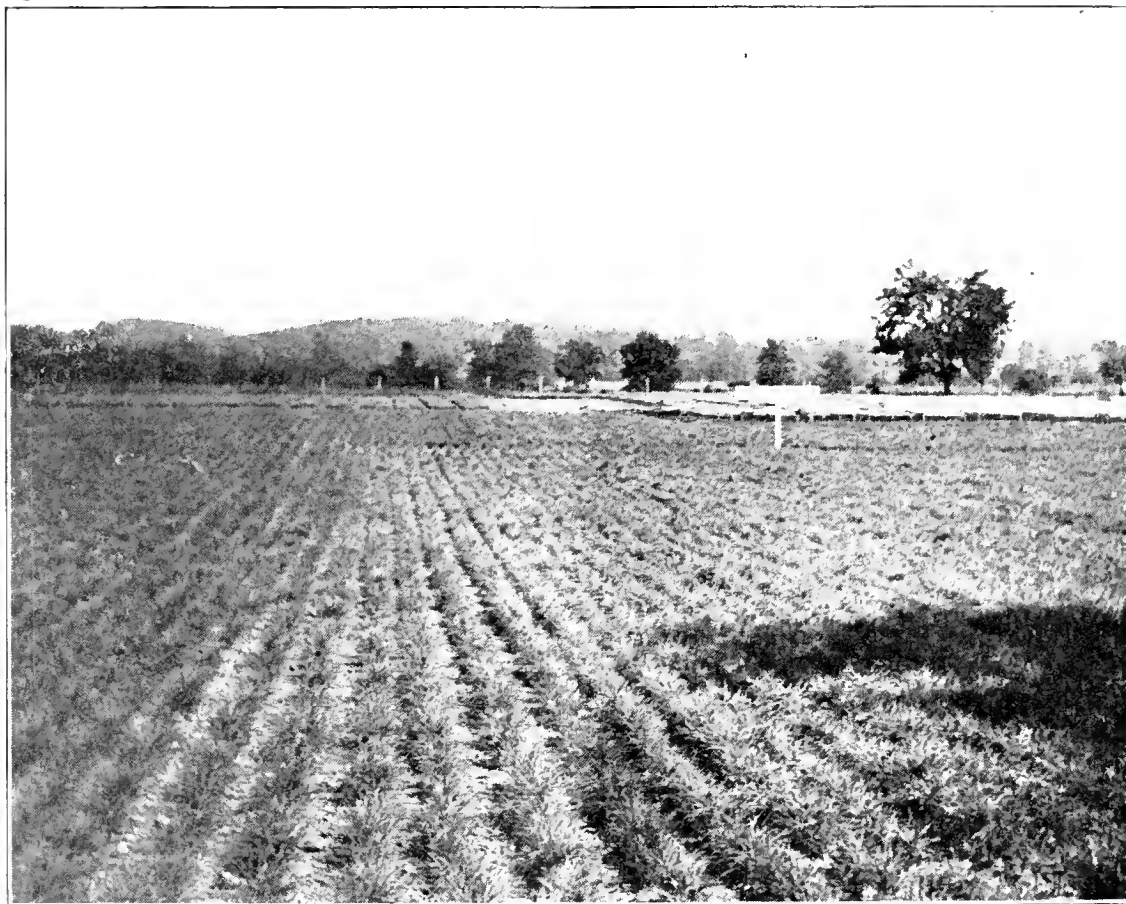
Advertising in one form or another is an absolute necessity to mail order success, and advertising needs to be studied just as carefully as the growing of stocks. Mail order advertising must be absolutely truthful, yet con-

cessful firms a constantly increasing use of more and better illustrations.

Scores of nursery catalogues come to the writer's desk each year, and I am amazed at the general poor quality of them and the lack of illustrations. People like to see what they are going to get, and the lack of proper illustration and descriptive matter indicates a lack of appreciation on the part of nurserymen of the A. B. C.'s of advertising.

Our newspaper advertising has always been incidental to the catalogue and mostly devoted to inducing prospective customers to send for the catalogue which carries the story of everything we have to sell and the prices, prices including delivery at his postoffice or R. F. D. box except on heavy seeds requiring express or freight shipment.

It is our aim to spend in advertising in all forms an average of about 15 per cent. of our gross sales. In good business years excess of sales may bring it as low as 12 per



*Red Pine 3-year Transplants in Foreground Two-year Seedlings—
Left Background One-Year Seedbeds Under Screens—Right
Background. North Eastern Nursery Co.*

vineing. It must be concise, because printer's ink costs much money. It must be in such a simple language that the uneducated man may read and understand.

Our dependence in advertising has been largely in our catalogue, two editions per year, due to the fact that in our Southern territory there are two distinct planting seasons. Our winter or annual catalogue, 600,000 copies, 96 pages, 3 cents postage per copy, brings us the heavy spring business. The summer and fall catalogue, 300,000 copies, 56 pages, 2 cents postage, finishes out the year.

In catalogue making we aim to make a picture book of it, for our experience is that pictures sell the goods. This is true of other lines than seeds, and if you will make a study of catalogues you will note in the catalogues of suc-

cent., but our allowance is 15 per cent. This covers newspaper and miscellaneous advertising, the catalogue and postage on the catalogue. So far as we can learn this percentage of advertising expense approximates that of other seed houses.

Without advertising mail order business of any kind cannot be successfully done. It must be done on a basis, however, that one can back it up by the goods the order is filled with and the service you render your customer. Our experience is that there is no profit in first orders. It is the repeat orders year after year that afford profits.

Two things we are dead set against. The first is the sale of goods by traveling agents that we have no control over as to the representations they make to the prospective buyer. We have no solicitors on commission or otherwise. One of our salaried men from the house travels

and solicits a particular trucking section for orders for a single item for three or four weeks each year, but other than that all sales are made directly on catalogue representations.

The other phase is the attempt to do both wholesale and a retail business in the same territory. It is utterly unfair to stock a dealer in a territory on a wholesale basis and then attempt to do a retail business with that dealer's prospective customers. If the retail buyer purchases direct from the house it is a case of cutting the local dealer's throat. If the buyer purchases from the local dealer the house has cut its mail order throat, so to speak.

It is no secret that a very large part of the sales of nursery stock are through traveling tree agents who purchase wholesale from the nurserymen. There are doubtless many honest, conscientious traveling tree agents. It is equally true that there are a sufficient number of another stripe. It is no common thing to hear tree agents classed with lightning rod agents of unsavory fame, and the nurseryman who employs or sells to these undesirables is certainly morally responsible for the misrepresentations made by them.

Misrepresentations by agents not only kill confidence in that particular agent, but give the entire nursery business a black eye and hold its proper development back.

This may or may not be the reason for the comparative scarcity of fruit trees and shrubbery around the generalities of southern farm houses, but I believe it to be a contributing factor and one that the nurseryman who takes a pride in his business should consider.

Handling the nursery business on a high grade mail order basis seems to me perfectly feasible. Attractive catalogues would certainly encourage a greatly enlarged planting of fruit trees and shrubbery, prices could be made lower than those charged by traveling agents and if stock and service was right the nurseryman would each year be building up a reputation that would in reality be a trademark and which no one could take away from him. I fully believe almost any line of retail business is capable of being successfully handled on a mail order basis. Success, however, will be dependent absolutely on the quality of service rendered.

In the earlier part of this paper reference was made to the humble beginnings of our firm that some of our good friends, in similar lines north, are kind enough to say is now either the second or third largest mail order seed house in the United States. You may be interested in making comparisons.

Twenty-eight years ago, the season of 1889-90, two were ample to handle all the business in a few hundred feet of floor space. We now occupy a little over 67,000 square feet of floor space in Atlanta, employ a regular all-the-year round force of some seventy-five people. This regular force expanded to about 225 during the height of the active seed selling season of last spring.

During the fiscal year ending June 1st, 1917, approximately four hundred thousand orders were filled. During the spring season of 1916 a record was made of filling six thousand orders in one day, a record for order filling in American seed houses.

The seed business has its peculiar kinds of troubles, not the least of which is that about one-half of the

year's business is done in some eight weeks in the year. To meet this sort of condition the business has to be systematized to the fullest degree. As much advance work such as packeting the seeds, getting in all supplies ahead, etc., must be done before the orders begin to come in.

In catalogue preparation our catalogue is not through the printer's hands before work on the next one begins. As an example artists had begun work on the cover of our 1918 annual two weeks or more before the printing and mailing of the 1917 summer and fall catalogue was completed.

Incidental to these we wish to express our firm belief in the value of a carefully designed and printed cover in colors. First impressions count a great deal. The catalogue cover is the introduction of your house to the prospective buyer and it makes a decided difference whether he gets the right kind of an impression as he takes the catalogue from envelope or wrapper.

Colored covers can usually be made to pay their cost by using them to carry attractive offers in natural colors, usually some specialties or apparent bargains.

Buy good printing and as a rule, place catalogue work as covering seeds, plants and trees in the hands of a printer who makes a specialty of that class of work. Some of the worst botches we have ever seen in seed, plant and nursery catalogues have come from good printing plants unaccustomed to this class of work.

Do not, as a rule, place contracts with printers who offer you the lowest price. There is a reason for low prices for printing and it's the same reason that applies to low prices for other things. You get out of it poor service and inferior printing.

For the past five or six years we have not asked for bids on catalogue or cover printing. We turn the specifications to the printer and our bill is based on the actual cost of paper, labor and other material, plus an agreed percentage of profit for the printer. In this way there is no skimping in quality of work and materials used and full count is insured.

This is a rambling sort of a paper, hurriedly gotten up on the verge of departure and with a score of other matters pressing for attention. It's not what I would like to have given you or what the occasion deserves. I will close it, however, by saying that I am an absolute believer in "mail order" as applied to seeds, plants and trees.

It's a clean cut business and one has the money in hand before the goods leave the hands of the seller. No man should go into it, however, without counting the cost of money and time necessary in advance, otherwise he will be apt to grow faint-hearted before he gets over to the profit side of the bill.

A catalogue or mail order house does nothing more or less than put the art of salesmanship on paper and through the mails there is almost no limit to the number of prospective buyers his paper salesman can see and talk to in a season.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.

Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in Nursery Stocks of all kinds. It circulates throughout the United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements. Drafts on New York or postal orders, instead of checks, are requested by the Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be addressed, Editor, Flourtown, Pa., and should be mailed to arrive not later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., December 1917

We Wish You All A Merry Christmas

Perhaps not with the joyousness of former years, but with the sincerity that always exists between true comrades in times of doubt and trouble.

With much appreciation of the support given by advertisers and readers, we reiterate the aims of "The National Nurseryman" "To advance the best interests of the trade at large by earnestly striving for more co-operation among nurserymen and a more universal use of the nurserymen's products as a sure means of benefiting all mankind."

A SUGGESTION FOR NATIONAL ADVERTISING

defined point.

We want every farmer to plant fruit trees for his own benefit as well as ours.

We want every home with ground around it to do at least a little ornamental planting to make them better places to live in so both the occupier and the nurseryman will be happier.

We want every park and recreation ground beautified to the limit, the community and the nurseryman will be the richer for it.

We want every country road, street and avenue where practical, to be lined with trees, the country would be richer for it and every man, woman and child would benefit.

The nurseryman wants these things and as they would

Efforts at national advertising are likely to be only partially successful unless they focus on a de-

benefit everyone if brought about, the big job is to make everyone want them.

Aims of National Advertising that fall short of the above will not measure up to requirements.

As a suggestion, the National Nurseryman proposes a Better Homes Exposition to be held five or even ten years hence.

To bring such a conception to a successful issue, it would be necessary to get the co-operation of every civic association and municipality in the country, and incidentally call for an advertising campaign that would put the nurserymen on the economic map.

IN TIMES OF WAR PREPARE FOR PEACE

"In times of peace prepare for war" is attributed to the immortal Washington. Few question the wisdom of it.

If this is good advice is not the reverse? In times of war prepare for peace.

However gloomy the outlook may be at present, we all know peace will come and with it the return of more normal conditions and grim efforts to catch up in the arts of peace.

Those who are prepared will have the biggest start. The nurserymen with faith in the future and a corresponding enterprise to go the limit in preparation while his brothers are waiting for exact information, then, will be the winner.

Propagate now, and to the limit, especially those lines that take several years before they are marketable suggests itself as a policy that is at least worthy of consideration.

THE PUBLICITY CAMPAIGN

The booklet endorsed by the National Association of Nurserymen and being gotten up by the J. Horace McFarland Co., edited by Mr. O. P. Beckley, bids fair to be a success. Already tentative orders for over 125,000 copies have been received.

The text is being written by Dr. L. H. Bailey, of Cornell, which insures the subject matter being authoritative and the illustrative features are also unique.

It is a good effort along the line of National advertising which will doubtless grow and expand.



Dear Sirs:—

We have here in Hamburg a large apple cider factory which throws away annually hundreds of tons of pomice. This pomice contains apple seeds which are valuable in the nursery business.

The problem is to separate the seed from the bulk of the pomice. Is there any machine or process which will accomplish this? It need not necessarily be simple since we are willing to go to considerable labor in order to secure the seed in large quantities. When the pomice

comes from the presses it is ground very fine and pressed into large flat sheets.

I am a subscriber to your valuable magazine and am writing to you thinking that perhaps you could help me or refer me to some one who could.

Yours truly,

E. V. W.

Answer We do not know of a machine that is manufactured for separating the seed from the pumice of apples and pears. We do not think, however, it would be a very difficult matter to construct one with the aid of an intelligent carpenter.

You will find the best process to separate the seed from the pumice will be by water, very much in the same way that free gold is separated from sand. The pumice can be floated off while the seed, being heavier, will sink to the bottom. If the flumes are built so that the flow of water is not too rapid and will give ample time for the pumice to be thoroughly separated from the seed it will be satisfactory. The seed that floats off with the pumice will be found to be empty shells. After the seed has been washed out by this process, it should be laid very thinly over fine sieves so as to be thoroughly dried as quickly as possible.

If you will take a little of the pumice and experiment with it in a shallow vessel, the process will readily suggest itself to you and you will be able to build a machine that will take care of your output.

Very truly yours,

EDITOR.

HOW TO MAKE LABOR CONTENT

An Address delivered before the Seventh Annual Convention of the California Association of Nurserymen at San Jose, October 10, 1917
By Max J. Crow, Gilroy, Cal.

SINCE President Coates assigned me this subject I have asked for pointers and suggestions, for methods or ideas from a great many employers of labor in varied industries; and not a single man of them all has opened his heart and given me a solution of the problem. It seems to be as great a puzzle to them as I confess it is to me.

We all employ men in our nurseries, and we all know the aggravation, worry and oftentimes serious loss occasioned by our good men going to a so-called better job, or demanding higher wages than we can possibly afford to pay. I venture the assertion that every nurseryman present has had the experience of carrying more men than were really needed through slack seasons of the year in order to have experienced help when the rush of budding or the strain and hurry of the shipping season comes on, only to have from one to several "pull their freight" about the time their services would yield a profit rather than a loss.

We frequently read in the periodicals of the very unsatisfactory conditions under which men and even women and children are required to work. Most harrowing tales come to us from time to time, tales of long hours, unsanitary conditions, poor food, rough treatment and just enough wages to keep body and soul together.

But I have yet to hear a single complaint in these respects regarding a nurseryman. So far as I have observed or have been able to ascertain, where board and lodging go with the job, our men are better housed and fed and are paid better wages than in any other branch of agriculture, capability considered; and furthermore, our regular men have work the year round and usually for as many years as their restlessness will permit their staying on one job. But in spite of all this the usual term of a good man's service is from one to two years—rarely three.

There are, I should say, among the white races we employ, three distinct classes of men. First, there is the bright, capable young fellow of good habits who would in time be ideal if we could keep him on the job; but in this country he has so many opportunities for going it on his own hook in some line of agriculture, that he soon graduates as a wage earner and is in business for himself. I should say ninety per cent. of our best white nursery workers are lost to us in this way. In another class are those who feel that any kind of manual labor is degrading; that any one paying them wages is an iron-heeled oppressor of the poor; they "accept a position" as a favor to the employer and proudly carry a chip on the shoulder, ready to quit the job at the slightest word or suggestion or criticism of their poor work. In still another class are good, capable men, some well drilled in nursery work and really worth good wages; but John Barleycorn has a mortgage on them and forecloses at frequent intervals, so the length of service of one of these men is the length of time between sprints, usually from one pay day to the next. Can anyone tell me how it is possible to content the men of any of these classes for any length of time? The men of the first class cannot be expected to continue as wage earners indefinitely, or after they have saved enough to start working for themselves; we must admire this trait in them. The second and third classes we can use only in a pinch, and usually the pinch outlasts the man.

In face of these conditions we are severely criticised when we resort to the use of the Oriental. The Japanese and the Chinese are peculiarly adapted to nursery work. While not averaging as strong physically as the whites, yet the most of them are good, steady workers and accomplish as much or more; they learn quickly and soon become adept budders and grafters and good propagators. If comfortably housed in accordance with their standards, many of them will stay year after year.

The idea seems to prevail that the reason for employing Orientals so largely in our nurseries is on account of their supposed willingness to work for low wages. This is not true; it is now necessary to pay the Japanese and the Chinaman practically the same scale as the white man. The real reason for our employing them is because they are more dependable as a class; because they stay with the job and we don't have to break in a new crew each season; because, once taught budding and grafting, they will produce results year after year; because they never get drunk; because they never ask for more money than they can possibly get elsewhere; and because they haven't the feeling that manual labor is demeaning.

With the war drawing thousands upon thousands of

our young men (probably the majority from agricultural pursuits) the call for help to plant and save our crops will be heard with increasing frequency. What are we to do?

France and England have found it absolutely necessary to import Oriental labor to grow the crops to feed, as far as possible, their soldiers at the front and the people at home. But it seems as though we, in the United States of America, are to be compelled to struggle along as best we can, watch our products go to the "Demnition Bow Wows" for the want of hands to save them; and all because a bunch of politicians playing up to the labor unions deny us the privilege of securing more help in the only way possible, which is to import, temporarily, a sufficient number of Orientals to carry on the very necessary work. The politicians refuse us this relief, yet not a single man of them and not five per cent. of the men

So it seems to me the only possible way to "Make Labor Content" is to use the labor willing to do the class of work required of it; then pay such wages as conditions will warrant and pay without a grouch. If we get a particularly good crew, and if the business will stand it, voluntarily advance the wages; this shows we are willing to "tote fair" and that good work is appreciated; and with comfortable quarters and surroundings we may then reasonably expect a satisfactory degree of contentment.

Before concluding I wish to state emphatically that I am not an employer of Orientals at this time and that I am not, by choice, an advocate for them. When establishing my nurseries at Gilroy, eight years ago I resolved to employ nothing but white labor and have adhered to that resolution strictly, with exception of using two Japanese budders during two budding seasons. I have



White Pine Two-Year Seedlings — Beds 4x102 feet.

North Eastern Nursery Co.

belonging to the all-powerful unions would go into an orchard and pick prunes or into a nursery and bud, hoe or irrigate so long as existence could be eked out in any other way. Some of them might let wife or children work for a time in the fruit, but as for Mr. Politician or Mr. Union Man, no, never.

The college graduate is usually not a success as a teamster, and it seems no longer possible to form a satisfactory connection between Young America in general and the handle of a spade. So we are up against it so far as white help is concerned and are simply forced to do the next best thing. In plain words, the vast majority of white men in California who depend upon their labor for a livelihood, do not want to work in the orchards and fields and one cannot content them in such employment; they will take it only as a last resort. But just the same, these very men raise a vicious protest at the suggestion of procuring men of other races to do the work they themselves have spurned.

always treated my men as I would expect to be treated were positions reversed, and have paid the prevailing wage, or more; yet not in a single instance have I been able to keep a man on the job longer than about two years. So it has been a costly and annoying experience and I have just about arrived at the determination to fill future vacancies in the field force with Japanese, if they are to be had. This thing of continually teaching new men, only to have it all to do over again every few months is getting exceedingly monotonous.

In view of the present labor situation, war conditions, etc., it would seem wise for this Association to go on record as favoring the plan suggested some months ago, of importing enough Chinese to fill the gap caused by the drafting of our men for the army, and to meet the necessity for increasing production of all food-stuffs; the Chinese to be returned to their own country at the end of the war.

Methods of Prevention of Tree and Plant Diseases

An address delivered before the Seventh Annual Convention of the California Association of Nurserymen at San Jose, October 10-13, 1917, by Earl L. Morris, County Horticultural Commissioner, San Jose, Cal.

THE subject on which I have been asked to say a few words is "The Methods of Prevention of Tree and Plant Diseases." It is intended, I take it, that this subject be treated from the standpoint of the nurseryman. This limits the discussion because, of the many tree and plant diseases, comparatively few effect young trees by the time they leave the nursery. At least if such young trees are affected it cannot be known, hence is a case of "Ignorance is bliss." I shall consider four conditions which may occasionally be met in trees about the transition stage from nursery to orchard; namely, crown gall (*Pseudomonas tumefaciens*), oak fungus (*Armillaria mellea*), sour sap, and blackheart.

Crown gall, well known to all of you, is caused by a micro-organism and the condition is termed a bacterial disease. It has been studied long and carefully yet we know next to nothing of methods of prevention or cure, and little concerning methods of distribution. Ground badly infested with this organism should not be used for nursery purposes, or in fact for growing or propagating anything known to be susceptible to the disease. In some cases it seems to be indigenous to virgin soil. About the only sure way to determine whether or not soil is infested is to grow the nursery stock and note the size of the bonfire at the harvest. However, it is certainly far wiser to use virgin soil than old soil which is known to be infested. Since this disease is almost universally distributed, and may be found in practically all orchards and all nurseries, the only thing is to sort out and burn the trees with knots or galls on the main roots so near the trunk that they will not be removed by the usual root pruning required at planting. By some this may not seem an orthodox procedure. However, the tree on which a gall may be situated well out on the root where it must be removed when the root is pruned is not essentially different from an adjacent tree, the gall on which was severed by the tree digger and left in the ground, or yet another tree apparently clean which may have an incipient gall in a more injurious location, but so small it cannot be seen at all. The grower has a right to expect trees apparently clean. The nurseryman should deliver trees apparently clean, but farther than that, in the case of crown gall, neither party can go with any degree of accuracy.

OAK FUNGUS (*Armillaria mellea*)

Oak-fungus is a disease but rarely found in nurseries for which we may be indeed thankful since it is as fatal to plants as is tuberculosis to animals. It is a toad stool fungus growing as a white felty mass between the bark and wood of the roots and trunk under ground. Sometimes it takes the form of black or brown strings about the size of twine and creeps along the outside of the bark. About December in this locality it may show as a mass of large brown toadstools usually at or near the base of a tree or where an old root comes near to the surface.

While it is called "Oak fungus" it is not at all confined to the oak but infests most of our forest trees more or less. Nurseries planted along creeks, or on cleared land, or where large trees once stood, may occasionally have a few infested trees. There is no known remedy. Inspection is the only safeguard. Have some one who knows the disease go through the nursery thoroughly and map out any diseased area and burn any diseased trees. Usually the loss to the nurseryman is very little, not more than ten or fifteen trees but should one of those trees be planted in an orchard and start an "oak fungus spot" the orchardist would continue to lose trees during the entire lifetime of the orchard. That "oak-fungus" is found in an orchard is no proof that it was carried there on nursery stock. On the contrary most infestations can be traced back to diseased native trees which once grew there.

SOUR SAP

Sour sap is a term used to indicate a condition not necessarily a disease. Any injury to the cambium or growing layer between the bark and the wood which kills the tissue may result in the souring of the sap. The sour sap condition which I shall describe, and which causes the greatest annoyance to both nurserymen and orchardists, is undoubtedly caused by sudden climatic changes. It might be expected after a freezing temperature in the early morning followed by warm sunshine. Young orchards, and especially young apricot orchards from one to three years old, may fail to start in the spring, or having started die in from thirty to sixty days. In either case the roots may be in good condition and an examination of the above ground portion reveals a dead sour cambium layer nearly or quite surrounding the tree generally near or at the ground. Usually in such cases a vigorous shoot appears just above the union which will make a large tree much quicker than one can be grown from a replant since the root system is already established. If for reasons to be discussed later it seems best to replant there need be no fear of a fatal disease passing from the dead tree to the replant in the same hole. If a tree is grown from the old root and new shoot the great danger is that fungi causing wood decay may find entrance where the dead stump has been removed before the new growth has closed over it, and that in ten or fifteen years the tree will be weak at that point. Great care must be taken to protect the wound and even then there is danger of infection.

Whether it is best to try to make a tree from a sound root which has been in orchard form more than one year, if the whole top must be removed, or whether it is best to replant, can be determined only by future observations. That a good growth will come from such a root is certain, however, two years time and the cost of trees and labor is very little compared with the possible loss of trees after they have come into full bearing. There do

not seem to be any carefully prepared records to determine which method is preferable.

BLACK-HEART

Another condition commonly known as "black-heart" is often found in nurseries, but is most serious in orchards from three to eight years old. Here again apricots are more susceptible than most other trees. The growth is normal until about the first or middle of June when the leaves at the tip of a branch wilt rather suddenly. This wilting may extend to other branches and in some instances over the whole tree. The first indications of the disease may appear any time after June even until late in the fall when the leaves are about ready to change color naturally. If very late the characteristic wilting may not be very perceptible, but in its stead will be a tendency to premature ripening of the leaves. In case of June or July wilt a few weak yellowish leaves may grow later, but they never amount to anything. Except in very severe cases the portion of the tree below the wilt will start and grow normally the next spring. The disease may or may not appear later. The fact that a few trees in an orchard are affected does not mean that all the trees will become so. Neither does it mean that the particular diseased trees are going to die. A few may die but if proper precautions are observed most of them should make good trees. Examination of a cross section of an affected limb shows brown or black heartwood which has given rise to the local name "black-heart." Investigations carried on by the Department of Plant Pathology of our State Experiment Station show this trouble to be caused by a fungus growing in the wood. We do not as yet know how or when it enters. There is no known remedy, it seems to be much more prevalent in irrigated rapid growing, than non-irrigated slower growing trees. This is particularly noticeable in orchards inter-cropped with tomatoes which require much irrigation and permits comparatively little cultivation. While this disease cannot be wholly prevented much can be done to keep it down. Keep the soil moisture constant and moderate by repeated cultivations rather than by irrigation. If the land must be irrigated, do not wait until the growth of the tree has been checked and do not apply an excessive amount of water. Endeavor to keep the trees growing constantly but not too rapidly during the entire growing period. "Blackheart" is not a very prevalent disease in nursery stock. The time to inspect for it is when the trees are being headed back for planting or just after being planted. In the case of apricot trees at least all those showing black or brown heart wood should be discarded.

Rochester, N. Y., November 3, 1917.

National Nurseryman,
Hatboro, Pa.

Gentlemen:—

Enclosed please find subscription to THE NATIONAL NURSERYMAN. Your last issue was especially interesting.

Yours truly,

IRVING ROUSE.

THE FUTURE OF PECANS

Portion of paper Read by R. L. Scott, Secy. Citronelle Nursery & Orchard Co., Citronelle, Ala., Before the Meeting of the Southern Nurserymen's Association, Atlanta, Ga.

The Paper Shell Pecan is a term which is applied to the standard varieties which are being propagated and put on the market as being superior to what is commonly known as seedlings and Texas nuts which grow wild in that country among the many standard and approved varieties of nuts there are many that are not as thin shell as the term paper shell indicates. But this does not deter from the high quality and popularity of same, we believe that the pecan industry is only in its infancy therefore its greatness lies in the future. In discussing the subject, the question is always asked will not the business be over done, and looking into the future this is the most important question to answer.

All things are good or bad by comparison, prices are fixed by the supply and demand with something better or something not so good as the basis to regulate the price. The greatest consumption of nuts in this country is the English or Persian walnut with which you are all familiar. This nut is being grown very extensively in California, but the bulk of what is used is imported as will be shown by figures given later.

I wish to state, and I do not fear that the statement will be disputed that the Paper Shell pecan is as far ahead of the English or Persian walnut as day is ahead of night and I will state further that the pecan can be produced in the coast country as cheap as the walnut can in California. And there is being planted today in California one hundred walnut trees to every pecan tree planted in the coast country, and just think the price of walnuts ranges around 12c per pound. If California can make money at these prices the South Land should grow rich. The consumption of nut products can only be shown by quoting from government reports, the production of the English walnut in California for the year 1913 was 28,600,000 pounds; for the year 1916 it was 24,300,000 pounds. The imports of the English walnut for the year 1914 was 28,267,699 pounds in the shell and 8,928,029 pounds of kernels, and for the year 1915, 22,630,220 pounds in the shell and 14,228,714 pounds of kernels. Please note the change in one year the amount of shelled nuts nearly doubled and that in the face of the fact that the duty is higher on the shelled nuts than those in the shell. Please note also that the production of 24 to 28 million pounds of nuts in California had no effect on the importations? In fact the imports increased year by year which shows that the demand is keeping up with the production.

If the production of pecans ever becomes so great as to lower the price any ways near the price of walnuts, the

intense demand already created for the walnut will be switched to the pecan. Also bear in mind that we have the world for a market as the pecan is produced nowhere in the world but America. As the production increases we must make greater efforts to keep the shelled nuts before the people by putting them up in fancy packages and well advertised so they may be found in every candy store in the length and breadth of the land. Of course this is not necessary at the present time for the price of nuts is too high to encourage the use of them by the masses. But when the hundreds of thousands of acres of our pine lands becomes a forest of Paper Shell pecans and every village and hamlet will have their pecan warehouses and only then will we begin to see what the future of the pecan really is. The future of the pecan is a bright and shining light for those who plant now and in the future, but whom must we look to, to keep this light trimmed and burning, the Nurserymen. Have we done our part in the past, will we do our part in the future? Good trees well grown, true to name, no seedlings for sale, the discouraging of careless planting and care of trees, poor location, etc., etc., is our duty. The value of all nuts imported into the United States in 1915 was \$12,987,295, and the total number of pounds was 79,174,227. So my friends you may have no fears of the future either in regard to over production or under con-

sumption and with the statement that it will require all the enthusiasm and best efforts of the optimists to produce enough of the Paper Shell pecan to supply the unborn generations.

A SIMILE

"Dad, what do they mean by perennial?" "Continuing from year to year," answered pop. "Like my hat," interposed ma. And then there was a deep, portentous silence.

LISTENING FOR WORMS

He was one of a squad of new arrivals, and the sergeant-major, who was addressing them, noticed that all the time his eyes were on the ground and his head held downwards in a listening attitude. At last the sergeant-major walked up to him.

"What were you in civil life?" he rapped out.

"A—a gardener, sir," came the timid response.

"Oh, I see," said the sergeant-major, contemptuously, "you're listening for worms, I suppose!"

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Louisiana, Mo., October 26th, 1917.

Concord, Ga., November 22, 1917.

National Nurseryman,
Flourtown, Pennsylvania.

National Nurseryman,
Flourtown, Pa.

Gentlemen:—

Fruit tree stock—all classes—is good property this year.

Apple trees are bringing good prices and will probably bring better before the season closes. Even now, some varieties selling rather close. Heavy trade in sight.

Stock of peach somewhat short compared with last season's sales and prices considerably higher. However, the large buyers are not placing their orders, probably on account of the higher prices that nurserymen are forced to ask. We believe there will be enough peach to go around.

Pear, plum, cherry, apricot and quince about a normal supply with brisk demand.

Grape not very plentiful and excellent property. In all small fruits there seems to be a well balanced stock. For the coming year there will probably be a little less stock than this year, altho' we believe there will be enough to take care of the demand. And we also believe that for a year or two following, there will be enough stock produced to take care of all the business in sight.

Yours very truly,

STARK BRO'S NURSERIES.

Gentlemen:—

Recent discussion of the matter of prices with a number of Southern nurserymen indicate that there will be a considerable raise the coming year. This applies both to the retail price and the price to dealers or salesmen. They say the present condition and cost of labor and the future uncertainty about it, together with the increased cost of everything that goes into the production of nursery stock, makes it imperative that the nurseryman should have better prices, if he expects to remain in business and keep out of the poor house. With cotton, corn, wheat, meat and nearly all other farm products up around 100 per cent. over a year ago and still climbing, the nurseryman is forced in self defence, to move up his prices also. The raise in tree prices will probably not be as great as on farm products. The new prices seem to run about 35% to 50% higher than the past year. This is a big subject and one that should have the deepest consideration of the nurserymen. He must keep his selling prices on a just basis and at the same time must have enough to make a fair profit in the business, and this is the problem that he is facing just now.

Yours truly,

C. T. SMITH.

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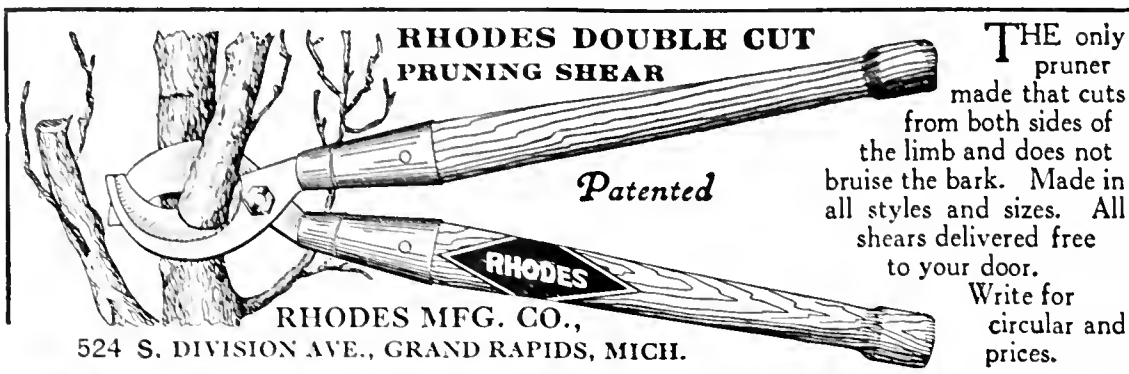
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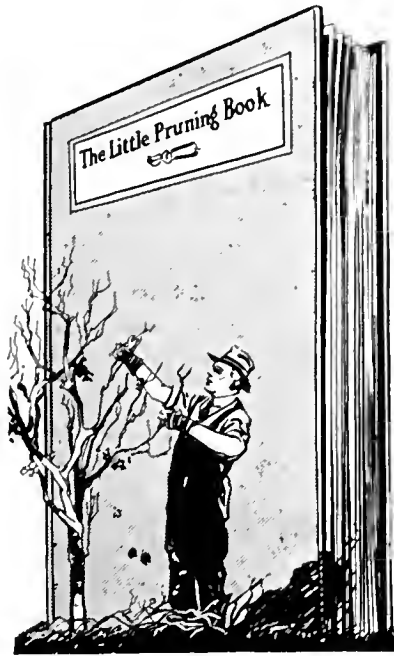
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3,000 "6	- 8	200 "	"	5 - 6
3,000 "5	- 6	100 "	"	1 1/4 - 1 1/2
7,000 Boxelder4	- 5	100 "	"	1 1/2 - 2
9,000 "5	- 6	SOFT MAPLE		
10,000 "	.....6	- 8	20,000 Sdg.	3	- 4
200 "	.....8	-10	30,000 " & Trnspt.	4	- 5
4000 Catalpa Speciosa	..4-5		3,000	.....5	- 6
3,000 "	.....5-6		2,000	.....6	- 8
3,000 "	.....6-8		400	.....1 1/4 - 1 1/2	
400 "	.....1 1/4 - 1 1/2		300	.....1 1/2 - 2	
5,000 Elm	.....5	- 6	300	.....2	- 2 1/2
3,000 "	.....6	- 8	200	.....2 1/2 - 3	
1,000 "	.....8	-10	MULBERRY		
3,500 "	.....1 1/4 - 1 1/2		4,000	.....12-17 Sdg.	
3,000 "	.....1 1/2 - 2		700	.....3- 4	"
700 "	.....2	- 2 1/2	Poplar—Carolina & Norway		
4,000 Hackberry	3	- 4 ft.	2,000	.....8	-10
3,000 "	4	- 5	2,000	.....1 1/2 - 2 in.	
4,000 "	5	- 6	WALNUT—BLACK		
1,000 "	6	- 8	2,0004- 5	
500 "	8	-10	8,0005- 6	
"	1 1/4 - 1 1/2		2,0006- 8	
375 "	1 1/2 - 2		1008-10	
350 "	2	- 2 1/2	SEEDS		
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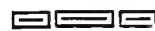
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THE NATIONAL NURSERYMAN



JANUARY 1918

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

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BLACKBERRIES; surplus of Ancient Briton, Rathbun, Erie.

ELM; American White—in car lots.

APPLE SEEDLINGS

Large supply of best quality. Grades unsurpassed.

APPLE GRAFTS—made to order. If short of labor, let us make your grafts for you. Satisfaction guaranteed.

Ask for Trade List and Bulletins. Send us your list of wants.

Nursery Trade

depends largely
on Confidence.

BUSINESS SECRETS REVEALED



FELIX & DYKHUIS

WHOLESALE NURSERIES

Boskoop, - - Holland

Ask for Our Beautifully Illustrated Catalogue

You Know Us for Quality

We offer the most complete line
in the East.

Heavy on,

APPLES

CALIFORNIA PRIVET

SPIREA VAN HOUTEI

ROSES

ORNAMENTAL SHRUBS

BERBERRY THUNBERGII

HYDRANGEA P. G.

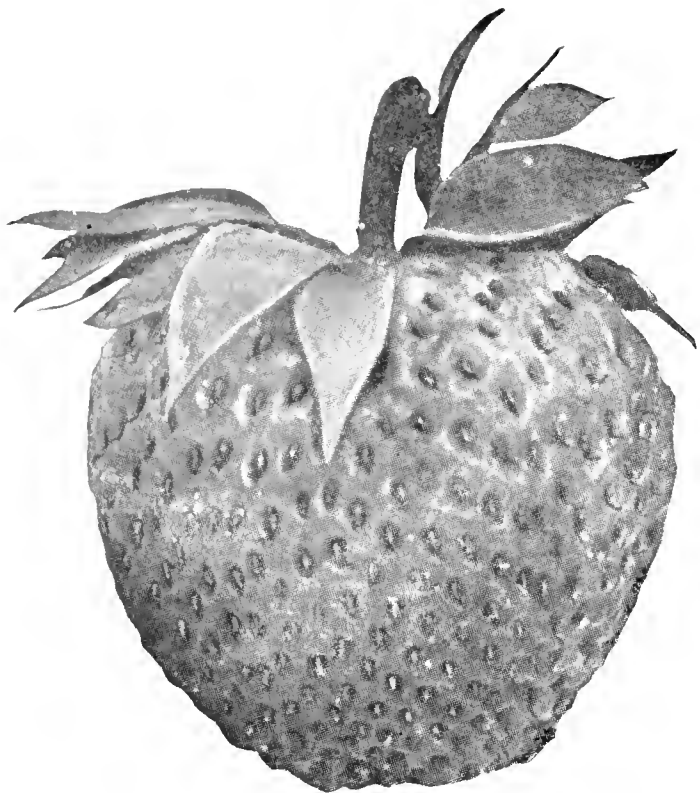
PLANTING STOCK, ETC.

Pleased to price your list of wants.
Shipping service of the very best.



C. R. BURR & CO.

Manchester, : Conn.



Strawberry Plants

FROM NOVEMBER FIRST TO MAY FIRST

We supply leading fruit growers, nurserymen and dealers with fine strawberry plants.

Our plants are healthy, heavily rooted, and guaranteed *true-to-name*.

We grow all the leading standard and everbearing varieties.

Get in touch with us regarding your supply for next season. Shipments made to you or direct to your customers. Packing unsurpassed.

The W. F. ALLEN CO., 100 Market Street, Salisbury, Maryland

L. R. TAYLOR & SONS
Topeka, - - - Kansas

===
SPRING OF 1918

===
A fine lot of
Apple Seedlings
Japan Pear Seedlings
Forest Tree Seedlings

===
ALSO
APPLE TREES
PEACH TREES
PEAR TREES
CHERRY TREES
FOREST TREES

FRENCH FRUIT STOCKS

Offered for Account of

VINCENT LEBRETONS NURSERIES
Angers, France

December or February shipment from France

Mahalebs, Myrobolans, Mazzards, Apple, Pear and Quince Stocks, etc. Also a full line of Ornamentals in lining-out sizes.

Advance prices now ready for Nurserymen.

HOLLAND STOCK

Norway and Schwedler Maples and other deciduous trees, Tree Roses, Boxwood, Koster Blue Spruce, Rhododendrons, Evergreens, Herbaceous Perennials, etc.

HARDY JAP. LILY BULBS

Such as Lilium AURATUM, RUBRUM, ALBUM, MAGNIFICUM, Melpomene, Roseum. Import prices. Case lots.

Fall or Spring Shipment

Write for prices

McHUTCHISON & CO. THE IMPORT HOUSE
95 CHAMBERS ST., NEW YORK



WISHING YOU ONE AND ALL



A Happy and Prosperous New Year

We thank you for courtesies and good business during the late 1917; and bespeak your continued friendship.

Sincerely

THE STORRS & HARRISON CO.

NURSEYMEN—FLORISTS—SEEDSMEN

PAINESVILLE, OHIO



JAN.
1918

The
Preferred
Stock

The
Preferred
Stock

Did you receive our

December Bulletin ?

It will be gladly sent on request,—if you are in “the trade.”

January issue will be mailed soon.

Is your name on our mailing list? It should be for both your good and ours.

Our Bulletins of unsold stock are issued at frequent intervals all winter and spring. They give latest assortments and prices on all stock we have to offer.

They usually include many scarce and desirable articles which are not easily located elsewhere.



Jackson & Perkins Company

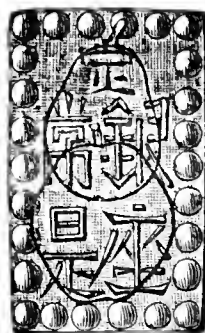
NEWARK

NEW YORK

The
Preferred
Stock

The
Preferred
Stock

Heikes—Huntsville—Trees



Established 1872

1500 Acres

**FRUIT TREES
ROSES and other
ORNAMENTALS**

For the wholesale trade.
All of our own growing.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

Hill's Evergreens

You can work up a good profitable trade in Evergreens if you have the right kind of stock. Our main specialty for over half a century has been the propagation of young Evergreen stock for the wholesale trade in immense quantities at low prices.

We have all the leading varieties in small sizes, for all purposes, suitable for lining out to grow on for your trade.

Nurserymen who have heretofore depended on Europe for their young Evergreen plants can now be assured of a good reliable source of supply right here in America, and we solicit the opportunity of quoting on your requirements.

“Made in U. S. A.” and “American Stock for American Planters” should, from now on, more than ever, be the slogan of American Nurserymen for it means “money saved in the long run” to start with nice, strong, sturdy, vigorous American-grown stock which has been produced right here in America.

YOU want to keep posted on Evergreens;

WE want to become better acquainted with you;

Let's get together.



The D. HILL Nursery Co., Inc.

Evergreen Specialists

LARGEST GROWERS IN AMERICA

Box 401

Dundee, Ill.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS

BERRIES CLEMATIS

EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

70 Years

1000 Acres

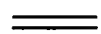
When writing to Advertisers please mention the National Nurseryman.



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE



THE

North-Eastern Forestry Co.

CHESHIRE

...Connecticut...

Promise and Performance

The **Plan** on which we purpose doing business has been stated in this space. Results are beginning to appear. Read this:

"We are enclosing herewith a receipt-slip for the car of stock received from you recently and it gives us a great deal of pleasure to be able to state that it is about the best graded lot of stock we have had come on our grounds from an outside nurseryman in a good many seasons."

That was written by Mr. E. J. Flanagan, Secretary of the R. G. Chase Company, Geneva, New York—nothing anonymous about Mr. Flanagan's opinion, either. He is a critical buyer; every tree and plant has to stand the test of the demands of a high-class retail agency trade; we know him—know his trade and we know our goods. Out of a carload, not a tree or plant was rejected. That's our performance.

Mr. Flanagan says: "We like the way you are trying to do business." That refers to our **Plan**. We repeat it here: We grow our stock properly and we grade it right. We grow it for nurserymen only. We sell nothing to planters nor to Department Stores.

We want to get the rest of the "Flanagans" to know our stock and our methods; there are many equally careful buyers in the Trade who demand high quality and high standards in goods and in methods.

You will come around—"Eventually—Why not Now?" Read this little preachment again; there's an idea in it.

PRINCETON NURSERIES

At Princeton, in New Jersey.

January first.

Applying Modern Merchandizing Methods to the Nursery Business.

J. H. Skinner & Co.

Topeka, - Kansas



Apple Seedlings

Mahaleb Seedlings

Forest Tree Seedlings—Catalpa, Elm, Maple, Mulberry, Black Locust and Honey Locust.

Fruit Trees—Apple, Cherry and Kieffer Pear. Rhubarb, Divided Roots, True Myatt's Linneaus.

Grapes

Shade Trees

Flowering Shrubs

Paeonias.

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

Rawhide Brand of Shipping Tags and Tree Labels

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

Lining Out Stock

Our list of small stock for lining out in nursery rows is now ready. Send for copy.

Plant heavy now. This stock will just be saleable when the war is over.

Send for sample and prices of
Hydrangea p. g. layers. They are the best.

Thomas B. Meehan Co.,
WHOLESALE NURSEYMEN

Dresher, - Penna.

Planting Stocks

They should be ordered NOW for timely delivery. No trouble about arrivals from France; the tonnage required for our men and materials sent "over there," insures ample space returning. Prices being practically the same, it is a question of quality and grades and packing and service. We merely remind our customers of the way their previous orders have been handled; those who have not yet tried us can get satisfactory assurances as to our goods and service from the one hundred sixty leading American nursery firms we have supplied. Glad to put YOU in touch with our satisfied customers in YOUR own state. Mr. Delaunay's complete list will be sent on request. But—get that order placed!

John Watson & Company

NEWARK - NEW YORK

November First

For Spring of 1918

*WE will have our usual line
of Ornamentals, Shade
Trees. Perennials, Apple,
Plum, Cherry, Peach, etc.*

C. M. Hobbs & Sons

Marion County

Bridgeport, - - Indiana

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

APPLE SEEDLINGS
APPLE GRAFTS
MAHALEB SEEDLINGS

and a
COMPLETE ASSORTMENT OF
GENERAL NURSERY STOCK

Without question the demand for apple trees is increasing and the supply is decreasing. The determining factors in deciding the size of your apple plant this season should be: 1st, suitable land, 2nd, labor. You will strike a good market if you have the land and the help to grow the trees. BUT DO NOT WAIT UNTIL THE TOP OF THE MARKET IS REACHED.

SHENANDOAH NURSERIES
D. S. LAKE, Pres. SHENANDOAH, IOWA

SPECIAL—For Early 1918 Spring Shipment

No. 1. Berry Transplants.
Teas Wpg. Mulberry—4½ to 7 ft.—2 yr. heads.
Eddelyea—Butterfly Bush, 2 to 4 ft.—at a bargain.
Sireas—Anthony Waterer, Van Houtte, 1½ to 4 ft.
Hydrangeas—Tree (4 ft.) Arborescens (Hills of Snow) Bush 2-4 ft.
Weigelas—Eva Rathka Rosea, Var. Candida, 2 to 4 ft.
Wick Hathaway Potato—Best Yields, Eater, Looker, Keeper.

SMALL FRUIT PLANTS

Current, Gooseberry, Grape Vines, Blackberry, Raspberry, Strawberry, of leading best kinds, including **FALL BEARERS**.

Your Want List will receive prompt attention—You never Delivered finer stock, nor received quicker service than you get from

Yours Truly

Wick Hathaway's Berry Plant Nursery
Madison,



The Best In Nursery Products

We carry a full line of fruit and ornamental trees, evergreens, shrubs, etc. Send us a list of your wants.

A FEW SPECIALS

Oriental Planes from 1¼ to 3 inch caliper. A large stock of Sugar Maples, American Elms, Beech grafted River's, and Fern-leaved, Double Flowering Japan Cherries, Prunus Pissardi, Flowering Apples, Flowering Peaches, Magnolia Tripetela, Japan and American Judas, Japan Walnuts, American Arbor Vitae, Hemlock and Norway Spruce, Altheas, Forsythias, Philadelphus, Viburnum Plicatum, Weigela, Eva Rathke, etc.

Downing Gooseberries, 2 years No. 1.

HOOPES BRO. & THOMAS COMPANY

THE WEST CHESTER NURSERIES

Established 1853 West Chester, Pa. Incorporated 1907



BERRY'S Wholesale Nursery

Small fruit plants in variety; rhubarb; horseradish; California Privet; Barberry Thunbergii; Hydrangea P. G.; Spiraea Van Houghti; Peonies, etc.

See list before placing your order.

P. D. BERRY

Dayton

Ohio

We Are Prepared To Supply The Trade

ROSES, Field-grown, own roots and budded.
ABELIA GRANDIFLORA. Transplanted, field-grown.
BERBERIS JAPONICA.
AZALEA INDICA, (Home-grown).
GARDENIAS.
ENGLISH LAUREL.
MAGNOLIA GRANDIFLORA.
MAGNOLIA FUSCATA.
OLEA FRAGRANS.
CAMPOR (pot-grown).
LIGUSTRUM JAPONICUM, LUCIDUM, NEPALENSE, and other good varieties, fine bushy plants.
SATSUMA ORANGE. Field-grown, budded on Citrus Trifoliata.
BIOTA AUREA NANA (Berckmans' Golden Arbor-vitae)
BIOTA AUREA CONSPICUA.
RETINISPORA. In variety.
JUNIPERUS. In variety.
WISTARIAS. Grafted, best sorts.
APPLES.
JAPANESE PERSIMMONS.
ENGLISH WALNUTS.
MULBERRIES.
SPIRAEA THUNBERGII. A beautiful lot of stocky plants.

A fine stock of Hackberries, Koelreuteria, Tulip Poplar, Magnolia, Purpurea, Texas Umbrella, Sycamore and Elms.

Send us a list of your wants and let us give you quotations.

P. J. BERCKMANS CO., Incorporated
Fruitland Nurseries, Augusta, Georgia

STRAWBERRY PLANTS

All the leading Standard and Everbearing varieties. Have a nice stock of PROGRESSIVE, SUPERB AND AMERICUS, true to name. My plants are well-rooted, strong and healthy. They are pleasing a large number of Nurserymen and Dealers and they will please YOU and YOUR CUSTOMERS if you use them. IT WILL PAY YOU TO USE THEM. Will ship to you or direct to your customers. Send your list for prices.

LEAMON G. TINGLE, 165 Railroad Ave., Pittsville, Md.

French Nursery Stock



We grow all Outdoor NURSERY STOCK including FRUIT ORNAMENTAL, FOREST, ROSE STOCKS, Etc.

We have a large stock of ROSE TREES, also NEW and RARE TREES and SHRUBS, HARDY HERBACEOUS.

Our wholesale catalogue, most complete, exceedingly interesting, is at the disposition of the Nursery Trade.

If you have not received it, write to us.

E. TURBAT & CO.

NURSEYRMEN

ORLEANS

FRANCE

35,000 PEONY ROOTS FOR SALE

Must reduce my Stock

40 varieties to select from. I have them from the cheapest to some of the finest in the world.

Guaranteed true to name.

Send for list of varieties and prices

Address

P. D. BERRY,

Dayton

Ohio

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Spring 1918

GRAPE VINES—One and two years old. Varieties largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas. Free from weed seeds, all recleaned and guaranteed first class.

Correspondence solicited. Price list upon request.

CHAS. M. PETERS

P. O. Address, Salisbury, Wicomico County, Md., R. F. D. 3

Long Distance Phone and Telegraph, Salisbury, Md.

The Framingham Nurseries

200 Acres

High Grade
Trees Shrubs,
Evergreens,
Vines, Roses,
Etc.



Fine Stock
of
Rhododendrons
Kalmias
and
Andromedas

Send for Price List

W. B. WHITTIER & CO.

FRAMINGHAM, MASS.

We have a splendid stock of Grape Vines

and other small fruit plants for the Nursery trade, graded up to the highest standard and sure to please you.

Give us a trial order, send in your list now for quotations

A. R. WHELOCK

SUCCESSORS TO
WHELOCK & CONGDON

North Collins,

N. Y.



CALIFORNIA PRIVET, all grades at reduced prices.

ROSES, Crimson Rambler, Dorothy Perkins, Excelsior, Flower of Fairfield, Climbing American Beauty. These can be supplied in quantities. A general line of ornamental and evergreens. Your order will be handled by experienced men. Write for prices.

Southern Nursery Co.

WINCHESTER

TENNESSEE



REMEMBER!

If its a hardy perennial or so called old fashion flower worth growing, we have it in one shape and another the year round. We have the largest stock in this country, all Made in America, and our prices—

Why say more here. Send for our Wholesale price list of varieties and benefit from the opportunities this affords you.

Our motto: "Maximum Quality, Minimum Cost."

Address, R. W. Clucas, Mgr.
Palisades Nurseries, Inc. Sparkill, N. Y.

Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

Prepare for Spring by securing the best Cherry to be found. Our blocks of Cherry are the largest in the U. S. and quality the best. While the U Boats have been sending Mahalebs to the bottom the past two years, we have been fortunate in securing our usual supply and will have a splendid lot of trees to offer in the following:

CHERRY TWO YEAR general list of varieties

CHERRY ONE YEAR 11-16 up Sweets and Sours

PEACH ONE YEAR leading varieties

PLUM Japans, European and Hansen Hybrids

COMPASS Cherry and Apricots

APPLE leading varieties in connection with other stock only

Grafted English Walnuts and Northern Pecans

Special prices to car lot buyers on large orders

We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS
"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.
100 William St. - - New York, N. Y.

You can save **Time and Money**

If you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

Sarachan & Rosenthal
64-66 Hanover Street
Rochester, - - New York

BOXWOODS

Amaryllis belladonna
 (Belladonna Lily)

Spartium junceum
 (Spanish Broom)

ROSES

Abies nordmanniana
 (Nordmann's Silver Fir)

Choisya ternata
 (Mexican Orange)

We have a most complete line of Ornamental Stock for Florists and Nurserymen. Write for New Catalogue and Price List.

CALIFORNIA NURSERY CO.

NILES - - - CALIFORNIA
 Established 1865

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER - - - MARYLAND

We offer for Spring 1918

200,000 CALIFORNIA PRIVET, 1 year and 2 year

1/2 million ASPARAGUS, 2 year and 3 year

DOWNING GOOSEBERRY PLANTS, 2 year

BARBERRY THUNBERGI, 2 and 3 year transplanted

Can supply the above stock in car load lots or less, also, have a large stock of Rhubarb, Cumberland Raspberry Plants, Spireas, Deutzia Assorted, nice specimen plants. Evergreens, Horse Chestnut, N. Maple, Lombardy Poplar and Planes, etc.

We will make attractive low prices for early orders
 Send List of Wants

WOOD LABELS

For Nurserymen and Florists

The kind that give satisfaction

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

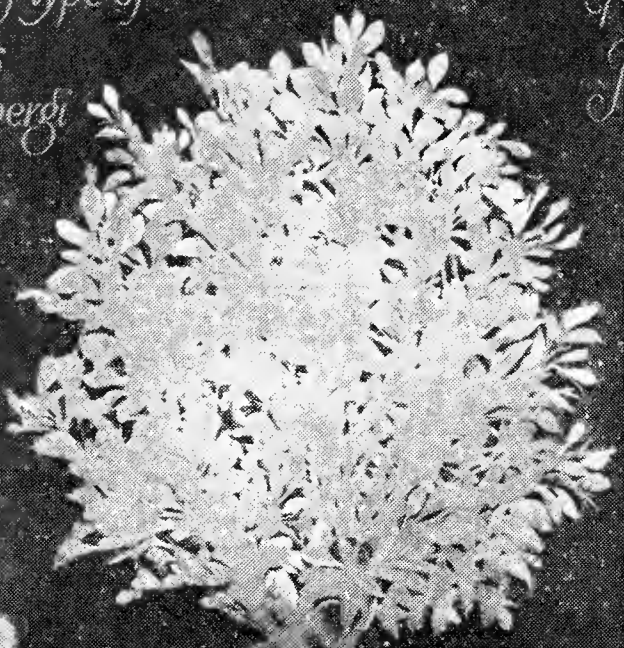
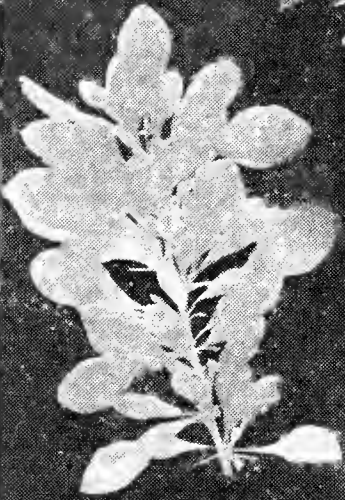
Samples and prices are at the command of a communication from you.

Dayton Fruit Tree Label Co.
South Canal St., Dayton, Ohio

Box-Barberry

*New dwarf type of
Berberis
Thunbergi*

*New
Ideal
Hedge
Plant*

TO BE INTRODUCED TO THE TRADE IN
FALL 1917
TO THE GENERAL PUBLIC
FALL 1918

ORIGINATED AND OFFERED ONLY BY
THE ELM CITY NURSERY CO.
WOODMONT NURSERIES, INC.
NEW HAVEN, CONN.

*Natural Size of
Box-Barberry Foliage*

Inquire for Prices

COPYRIGHT JULY 1917

Box-Barberry

Dwarf type of

Berberis Thunbergi

New Edge and Dwarf Hedge Plants

ORIGINATED at our Nursery sixteen years ago among a batch of Japan Barberry seedlings. It attracted attention in the seedling bed and has been under careful watching since. The original plant is now about 2½ feet wide, and globe-like in shape, its natural form.

It is pronounced a most valuable find by all who have seen either the original plant or the stock we have propagated from it, including experienced nurserymen, landscape architects and gardeners, expert station men and amateurs.

The public will take to it immediately. It's just what is wanted. As a formal-garden edge plant it is ideal;—this means thousands of it for many a single order. Equally desirable as a low and medium hedge plant, assuring a heavy demand. Trims into perfect formal specimens.

Propagates readily from either hard or soft wood cuttings. Will not come true from seed.

Offered to the Trade Fall 1917—No Restrictions

Offered to the general public and will be freely advertised in Fall 1918 and Spring 1919. Get up a stock and be ready for the certain heavy demand.

The Elm City Nursery Co.

Woodmont Nurseries, Inc.

NEW HAVEN - - - - - CONN.

New Nurseries at Woodmont, Conn.

Under the present conditions we find the mail is often delayed and we ask our patrons to please send advertising matter promptly to our office at Hatboro, Pa.

PRINTING

Catalogues
Stationery
Business Forms



The Robinson
Publishing Co.
Hatboro, Pa.

Specialists in Nursery Printing

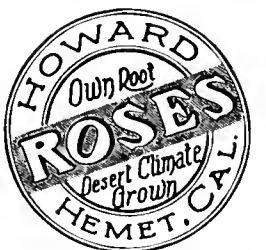
Ask for Prices.

We are the printers of this Magazine

LINING-OUT ROSES

Own-root "Desert Climate Grown" stock put under your care next summer will produce good plants for your early Fall use. Let us quote now. Samples if desired.

HOWARD ROSE COMPANY,
Hemet - - - - - California



Unusual and rare stock in great variety; hardy Bamboos, Palms, Crapemyrtles, fruit and Economic trees and plants, etc., etc., from all over the world.

New additions constantly being tested. Ask for complete descriptive catalog, and wholesale rates. 34th year.

ONECO - - - - - REASONER BROS., FLORIDA.

When writing to Advertisers please mention the National Nurseryman.